Google

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

NYPL RESEARCH LIBRARIES
3 3433 07598448 8

FORTY-SEVENTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

WITH

ACCOMPANYING DOCUMENTS,

1889-90

DETROIT:
[illegible]



FORTY-SEVENTH ANNUAL REPORT

—OF THE—

BOARD OF EDUCATION

—OF THE—

CITY OF DETROIT;

—FOR THE—

YEAR ENDING JUNE 30, 1890.

DETROIT:
LOZEE, O'BRIEN & CO., 40-44 WEST LARNED ST.
1891.

THE NEW YORK
PUBLIC LIBRARY
42425
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

BOARD OF EDUCATION

OF THE CITY OF DETROIT.

OFFICES: HODGES BUILDING, OPP. HIGH SCHOOL.

Members.	*Address.*	*Term Expires.*
CHANEY, HENRY A.	4 McGraw Building	June 30, 1891
LILLIBRIDGE, WILLARD M.	45 Moffat Building	" "
BREDE, FREDERICK W. F.	153 Columbia St., E.	" "
PARSONS, MRS. S. C. O.	560 Fourth Avenue	" "
SPRINGER, W. G.	335 High St., E.	" "
HALLORAN, THOMAS F.	132 Seventh Street	" "
TODENBIER, JOHN B.	People's Saving Bank	" "
COMERFORD, THOMAS F.	467 Lafayette Avenue	" "
VOIGT, WILLIAM, JR.	142 Sherman Street	" 1893
STUART, JOHNSON	742 River Street	" "
LINGEMANN, FRANK X.	652 Champlain Street	" "
FERGUSON, DAVID	67 Foundry Street	" "
BERRY, THOMAS	1100 Jefferson Avenue	" "
HOYT, B. R.	928 Hubbard Avenue	" "
ADAIR, WILLIAM	1248 Jefferson Avenue	" "
RATIGAN, JAMES F.	1650 River Street	" "

OFFICE HOURS:

SECRETARY,	9 to 12 A. M.—2 to 5 P. M.
SUPERINTENDENT,	4 to 5 P. M.
SUPERVISOR,	11 to 12 A. M.

OFFICERS FOR 1889-90.

WILLIAM VOIGT.....*President.*
THOMAS F. HALLORAN.....*President pro tem.*
JOHN R. KING.....*Secretary.*
JOHN S. SCHMITTDIEL.....*Treasurer.*
WM. E. ROBINSON.....*Supt. of Schools.*
ROBERT WALLACE.....*Supervisor of Property.*
WM. E. BAUBIE.....*Attorney.*

STANDING COMMITTEES, 1889-90.

Judiciary—Inspectors Comerford, Lillibridge and Brede.
Finance—Inspectors Springer, Ratigan and Berry.
Teachers and Schools—Inspectors Adair, Hoyt, Ferguson, Lingemann and Lillibridge.
Text Books and Course of Study—Inspectors Todenbier, Chaney and Parsons.
Health and Ventilation—Inspectors Hoyt, Halloran and Parsons.
Real Estate and School Buildings—Inspectors Ferguson, Comerford, Springer, Adair and Berry.
Janitors and Supplies—Inspectors Stuart, Todenbier and Ferguson.
Rules—Inspectors Lingemann, Brede and Stuart.

THE NEW YORK
PUBLIC LIBRARY
42425
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

BOARD OF EDUCATION

OF THE CITY OF DETROIT.

OFFICES: HODGES BUILDING, OPP. HIGH SCHOOL.

Members.	*Address.*	*Term Expires.*
CHANEY, HENRY A.	4 McGraw Building	June 30, 1891
LILLIBRIDGE, WILLARD M	45 Moffat Building	" "
BREDE, FREDERICK W. F.	153 Columbia St., E	" "
PARSONS, MRS. S. C. O.	560 Fourth Avenue	" "
SPRINGER, W. G.	335 High St., E	" "
HALLORAN, THOMAS F.	132 Seventh Street	" "
TODENBIER, JOHN B.	People's Saving Bank	" "
COMERFORD, THOMAS F.	467 Lafayette Avenue	" "
VOIGT, WILLIAM, JR.	142 Sherman Street	" 1893
STUART, JOHNSON	742 River Street	" "
LINGEMANN, FRANK X.	652 Champlain Street	" "
FERGUSON, DAVID	67 Foundry Street	" "
BERRY, THOMAS	1100 Jefferson Avenue	" "
HOYT, B. R.	928 Hubbard Avenue	" "
ADAIR, WILLIAM	1248 Jefferson Avenue	" "
RATIGAN, JAMES F.	1650 River Street	" "

OFFICE HOURS:

SECRETARY,	9 to 12 A. M.—2 to 5 P. M.
SUPERINTENDENT,	4 to 5 P. M.
SUPERVISOR,	11 to 12 A. M.

OFFICERS FOR 1889-90.

WILLIAM VOIGT.....*President.*
THOMAS F. HALLORAN.....*President pro tem.*
JOHN R. KING.....*Secretary.*
JOHN S. SCHMITTDIEL.....*Treasurer.*
WM. E. ROBINSON.....*Supt. of Schools.*
ROBERT WALLACE.....*Supervisor of Property.*
WM. E. BAUBIE.....*Attorney.*

STANDING COMMITTEES, 1889-90.

Judiciary—Inspectors Comerford, Lillibridge and Brede.
Finance—Inspectors Springer, Ratigan and Berry.
Teachers and Schools—Inspectors Adair, Hoyt, Ferguson, Lingemann and Lillibridge.
Text Books and Course of Study—Inspectors Todenbier, Chaney and Parsons.
Health and Ventilation—Inspectors Hoyt, Halloran and Parsons.
Real Estate and School Buildings—Inspectors Ferguson, Comerford, Springer, Adair and Berry.
Janitors and Supplies—Inspectors Stuart, Todenbier and Ferguson.
Rules—Inspectors Lingemann, Brede and Stuart.

REPORT OF THE PRESIDENT.

THE PRESIDENT'S REPORT.

To the Board of Education:

Without entering into the details of the proceedings of the Board for the past year, it may be stated that the Board of Education, through the liberal appropriations allowed by the Common Council and the Board of Estimates, have been able to erect three new schools with an aggregate of twenty-six rooms, a two-story brick building for the ungraded school, and additions to the Newberry, Ferry and McKinstry Schools, with an aggregate of fourteen new rooms. This, in a measure, has relieved the crowded condition from which the schools were suffering during the previous year.

THE UNGRADED SCHOOL.

The Ungraded School now occupies the lower floor of the Miami School, and has shown a constant increase in attendance since moving into its new quarters. Should the next legislature make some necessary amendments to our truant law, it will probably not be long before the building will be entirely occupied by this school.

THE TRAINING SCHOOL.

The Training School at present occupies temporary quarters upon the second floor of the Miami, together with a school of four grades. These quarters are entirely

inadequate for the school. Apartments should be set aside in one of our new twelve-room buildings, in order to give the young ladies an opportunity to study in all of the eight grades at the same building, directly under the supervision of their own teacher.

MANUAL TRAINING SCHOOL.

While the establishment of a Manual Training School, after the pattern of Eastern institutions of this description, would undoubtedly be a step of marked progress, the Common Council and the Board of Estimates have, until now, failed to make the necessary appropriations for such a school. The difficulty seems to be that an entirely new feature is to be introduced into our school system, at an expense apparently out of proportion with the resultant benefits. If manual training could be introduced at comparatively small expense, I believe the Common Council, as well as the Board of Estimates, would not refuse the necessary funds. I would suggest that, in a number of our Grammar Schools, free-hand and mechanical drawing and modeling be taught as elective studies to pupils over fourteen years of age every Saturday forenoon, and needle-work, cutting and fitting every Saturday afternoon. No special building would be necessary for these studies, the equipments would be of moderate cost, and teachers could be obtained from among our best artists, workmen and skillful ladies at a reasonable salary.

THE HIGH SCHOOL.

The High School is still located in its old building, from which the Board and its officers will be driven for want of room, and next year the building will even be

inadequate to accommodate the pupils of the school. The Board should again make an attempt at securing at least two new High Schools, one in the eastern, and one in the western part of the city, and citizens should do all in their power to bring about a favorable action in the matter in the Common Council and the Board of Estimates. It is estimated that the present site and building will bring an amount equal at least to the cost of two new schools, and their sites, and all the Board of Education asks of the Common Council is to allow it to sell this property and use the proceeds for new buildings and sites, and perhaps to appropriate the interest on the cost price for the time in which the new schools can be built. The present property is not owned absolutely by the Board of Education, but must revert to the city if not used for educational purposes; the Common Council, however, has the right to sell it if abandoned by the Board.

THE COURSE OF STUDY.

The Course of Study has not been materially changed, but such changes as have been made, were in the right direction. The work of simplyfying the course should go on, separating the unnecessary from the essential. In the methods employed, mechanical memorizing should be replaced as far as possible by developing individual thought, and while text books are time saving mediums of learning, their contents should not be committed to memory by the pupil, thereby doing the double evil of dwarfing his mental qualities and rigidly fixing as facts in his mind that which may be surpassed in another year. The conscientious teacher will be able to properly discriminate where methods cannot be rigidly prescribed. An additional course in commercial studies should be introduced in a limited number of our schools to afford those

who desire an opportunity of receiving such instruction without going to the High School. An additional year's attendance would probably be required, and if this entire time need not be occupied, the balance may be filled out by the study of mechanical drawing.

PHYSICAL CULTURE.

Physical Culture should be introduced as a course throughout the entire eight grades. The proper development of the body is as necessary to a harmonious education as the proper development of the mind. The healthful influence of such a course will not only exert itself in increasing the vigor of the child physically, but indirectly will strengthen its mental faculties.

In conclusion I may say that while there have been sharp differences of opinion expressed, and the Board has lacked that calm harmony which is often productive only of peaceful stagnation, there has been manifest during the past year an honest endeavor to increase the efficiency and enlarge the facilties of our schools. While the estimates asked by the Board of Education are undoubtedly large sums, and should be expended by this body with the utmost care and scrutiny, still, if this be honestly done, there is no purpose for which money should be so willingly given by the tax-payer as for our public schools, the one, of all our American institutions, which is the very foundation and base of the structure of our form of government and the liberty of our people. American patroitism can well be measured by the love for our public schools.

Very respectfully,

WILLIAM VOIGT, JR.,

Pres. Board of Education

REPORT OF THE SUPERINTENDENT.

REPORT OF THE SUPERINTENDENT.

To the Board of Education:

GENTLEMEN:—I present herewith to you the forty-seventh annual report of the public schools of the city.

The work during the year has not only been thorough but progressive in every feature. The older methods have been gradually superceded by the more modern ones. Pupils are led, not driven. In nearly every school pupils are made to feel that they are part and parcel of the school, and that the success of the work depends to a greater degree on them than upon the teacher; consequently a new interest is felt, and school life has become a pleasant rather than a painful task.

This state has not only increased the desire on the part of the pupil, but the teacher feels an increased strength in her work. When both teacher and pupil vie with each other to increase the interest in school life, so soon will the school be progressive and the greatest amount of good is accomplished.

This healthful and satisfactory condition of affairs has been greatly aided by the generous support of the authorities who have provided us so munificently with funds to erect new buildings and remodel old ones and purchase modern apparatus.

The school buildings erected within the last three or four years, although not gaudy on the outside, are light, roomy and cheerful within, and are supplied with the most modern appliances for heating, ventilating and the

carrying on of successful school work. The teaching force is growing stronger and better each year.

The Institute provided by our State Superintendent awakened in many of our teachers a stronger desire to improve in school work. All these fortunate benefits occuring during the year has, I say, greatly increased the efficiency of our school work.

SCHOOL ACCOMMODATIONS.

At the close of the last year there were 21,277 sittings in the different school buildings. Since that time, 1391 additional sittings have been provided in the following new buildings and additions: Trowbridge School, located on Forest avenue between Antoine and Hastings street, twelve rooms, 620 sittings; Potter School, on Tillman avenue between Myrtle and Magnolia streets, six rooms, 265 sittings; Miami Avenue School, on Miami avenue between Wilcox and Gratiot streets, 216 sittings; McKinstry School addition, four rooms, 200 sittings. The two-room building that was moved from Field avenue to a lot on Bellevue avenue near Waterloo street contains ninety sittings. This gives in all an increase of 1,391 sittings. By relinquishing the ninety sittings in the rented building formerly occupied by the Ungraded School and by taking out supernumerary seats here and there in rooms that had previously been overcrowded, the number is reduced to 22,285, so at this date there are 2,285 available seats, while the average attendance of pupils is but 17,646. There is in process of erection new buildings and additions to old ones which will be ready, or nearly so, by the beginning of the new year, and will contain twenty-six rooms and 1,300 sittings; so that when the new year opens 23,585 pupils may be accommodated. The following table will show a comparison with several cities as to the average number of pupils to a teacher.

CITY.	City Population.	School Census.	School Enrollment.	Average Attendance.	Enrollment in Parochial School.	Enrollment in Private Schools.	No. of Teachers.	No. of Pupils to a Teacher.	No. of School Rooms.	Average Salary.
St. Paul	143,000		14,503	10,851	5,710		321	46	403	$ 650
Brooklyn	806,000		77,730	64,191			1,958	38	1,800	575 p 1,300 g.
Chicago	1,200,000		135,031	100,730	30,000	10,000	2,651	50	2,182	400 to 2,800
St. Louis	460,000	117,820	58,316	41,159	25,000		1,151	17	907	630
Rochester	135,000		16,476	13,198	7,000	3,300	315	32	395	575
Cincinnati	300,000	84,388	37,000	28,915	14,700	1,550	710	50	658	832
Pittsburg	240,000		31,104	22,656			618	40	600	510
Kansas City		42,020	17,701	11,985			268			650
Buffalo	255,000		34,661	23,912	13,110		716	18	649	900
San Francisco	300,000	61,144	36,294	31,288	8,748		771	45	716	815
Minneapolis	200,000	60,700	20,502	15,281	2,500		440	50	377	695
Jersey City	163,000	65,411	23,036	14,802	6,389		401	45	318	915
Cleveland	260,000	71,304	35,073	26,038	12,506	1,907	648	35	612	
Baltimore		110,731	48,850	30,014			1,127	42	1,000	545
New York	1,511,000	440,000	148,000	133,733	32,080	12,955	3,478	30	3,250	970
Detroit	205,876	93,000	23,000	18,735	*11 15		401	30	401	610

* Includes both parochial and private schools.

NORMAL TRAINING SCHOOL.

In my last report I spoke of the many disadvantages that this school had to contend with, and I expressed the hope that this would soon be at an end, as plans and specifications had been made for a permanent home in connection with one of the grammar schools. My hopes were not fully realized for the plan was not carried out, as the addition contemplated was not made. We found, however, very comfortable quarters in the Miami Avenue building, and the school is now in a condition to accomplish some of the objects for which it was organized, viz: prepare graduates of our High School and similar institutions for the teacher's work. Every day the greatest good can be seen from this most important branch of our school system throughout the different schools where graduates of this school are at work. Through this channel correct and useful modern methods of education can be practically introduced without experimenting through the entire school corps.

Each year this school should have especial attention from the Board nnd citizens, and every appliance for promoting its interest should be secured, for it is in line with the present age in which every profession and trade makes special provision for educating.

The change made last year in the plan of granting certificates by extending the supervision of the normal teachers to two classes instead of one has been more than satisfactory, for it brings sixty instead of thirty teachers scattered throughout the city in immediate contact with the work in this department, and the increased ardor and interest exhibited and better results obtained by those of the senior class is watched and commented upon by those teachers of greater experience, thereby giving them an

inducement to adopt the more modern methods of education and thus increase their efficiency as teachers.

MUSIC.

The progress made by pupils in this branch completely shuts out any arguments against the establishment of this educational branch, and great credit is due the special teachers who have charge for their indefatigable labors to increase the efficiency of this particular branch.

The two or three public exhibitions given at Gilmore's concert and the flower show were evidences to the public that there was no lack of interest on the part of pupils and teachers.

The regular teacher is responsible for a continued interest in all special work, for a regular examination is not held to show the proficiency made in these branches. The interest manifestly shown is evidence that, in the majority of cases, teachers are awake to the fact that true education does not alone consist in the amount of knowledge in the three R's that may be crammed into the pupil's mind, but that a clear conception of all useful information is the thing desired.

UNGRADED SCHOOL.

The annual cry that has gone up for better quarters can no longer be made, as the building on Miami Avenue has been in use for the last five months. It is a model in its construction and convenience for this kind of work, compact, well ventilated and heated; with a plunge bath and other conveniences for the improvement of this class of pupils.

The one thing needed now is a law whereby this class of pupils may be compelled to attend school. I am

in hopes by the meeting of the Legislature next year such a law shall be framed and passed.

The enrollment during the year has been 241, of which 217 were boys and 24 girls. Seventy-seven pupils were in attendance at the close of the year, 69 have been permitted to go to work, 22 were sent to the Reform School at Lansing, 37 were transferred to the various public schools, 27 left the city and 7 were out sick.

The average daily attendance during the year was 52, and the pay of teachers for the whole year amounted to $3,650.00, an average for tuition alone of $70 per year for each pupil.

The work done by the officers to look after the truant classes of this school has been satisfactory, although many times they were detailed by their superior officers to do other duty outside of school work when they should have been hunting up truants from this school.

DRAWING.

With public sentiment almost entirely in its favor, it seems unnecessary to present in this report a treaties upon the merits of the study of drawing, or the possibilities of its bearing upon the education of the child.

With a school board generous to the necessities of this branch, and teachers willing and conscientious in their instruction, we may hope for that success in the near future which will place drawing upon that broad and stable foundation of which it is so justly worthy.

Many changes have taken place within the last few years in the methods of teaching many studies, but in none has the change been greater than in that of teaching drawing. The tendency of the present age is to bring more and more, the kindergarten instruction into our

primary work; and the social needs of the time demand a broader provision for industrial education or manual training. With this end in view, form-study or the study of type forms and of the study of objects has been introduced, and *all* instruction based upon the study of *things*. Of so great importance do I hold this feature of our work that I would make the study of the first four years a series of lessons in observation of form, and drawing but an incident thereto, and in this way gain for the study a broader expansion, both educationally and practically, in the grammar grade.

From the service thus rendered by the study of *things* the work has received a new impetus, and teachers bear me witness that no more powerful influence has been brought to bear upon the mind of the child in the development of thought than this two-fold action of observation (the study of things) and expression (the making or drawing).

Although much excellent work has been done in all of the grades, we hope each year to make our standard higher, and that each day may bear this record, "Better than yesterday."

PENMANSHIP.

A marked improvement in writing is noticeable in all written work. Much attention has been given not only to the work in practice-books and copy-books but in all writing done by the pupils. The teachers have manifested increased interest in the work. Several teachers in the higher grades have used pens for nearly all work in tests of examinations, and with very good results. Some schools even go so far as to use the pen in tests in arithmetic where a great many figures are required.

And where this has been tried the verdict seems to be in favor of the pen. The lead pencil has been a great hindrance to the work, not only does it interfere with the penmanship but encourages carelessness; for when children know that they can erase a word if it is not right they will not be as particular what they write as they would be if they knew that it must remain. Our aim has been to make the work simple in the primary grades; to give no more than could be done, and then to insist upon its being well done; and to make every grade fit into its place, so that there shall be systematic progression from the B. 1st to the A. 8th.

Every school in the city has been visited by the special teacher of writing once in every eighteen school days. The training school has been visited once every two weeks. The teachers from the training classes are doing excellent work in this line. Their blackboard work has very greatly improved.

Early in the year the special teachers in music, drawing and writing invited all who were interested in improving themselves in these studies to meet them once a week. About 120 teachers joined this class and very effective work was done, the result of which is very manifest, not only in the work done, but in the spirit in which it is performed.

Many of our teachers visited the National Teachers' Association in St. Paul last July, and from their observations there they believe that we might make a very creditable display of written work at the next meeting of the Association in July, 1891. Teachers from other cities have been sent here from time to time during the year to learn our methods and note our results, and all have gone away favorably impressed.

One thing which we think should be mentioned here is that near-sightedness seems to be fast disappearing from among our children, which is undoubtedly due to the attention given to position. If the eyes are kept at a proper distance from the slate, many of the objections now raised against the use of slates will not appear.

FLAGS.

The popular movement started by the Tribune in its offer to supply each school building for an amount equal to one-half the regular price met with a hearty response on the part of pupils and teachers, and in a very short time every school building floated the national colors. The many interesting sights on flag-raising day of our boys and girls assisting in raising, for the first time, the national colors over their school house and the hearty and lusty cheers that rang through the air as the stars and stripes unfolded to view were increased evidence that the boys and girls of the present day are imbued with the same patriotism that prevaded the bosoms of the fathers of our country. This feeling of love and patriotism should be fostered and re-kindled from time to time by just such innovations in school; for through what other channel can so many of our youths be reached as through the public schools?

EVENING SCHOOLS.

For the past twelve years but one night school—that held in the High School building—had been organized; but this year four more were opened, two on the west side, the Pitcher and Newberry, and two on the east side, the Duffield and Norvell.

The enrollment, attendence, etc., was as follows:

NAME OF SCHOOL.	Enrollment.	Average Nightly Attendance.	Per cent. of Attendance.
High School	795	387	78
Pitcher	846	393	80
Newberry	330	123	78
Duffield	398	150	81
Norvell	855	329	81

At the opening of these new schools the attendance was highly satisfactory; but gradually the interest subsided until, finally, at the close there were only in the High School, 238; Pitcher, 176; Newberry, 38; Duffield, 105; Norvell, 217.

The plan in use for the last six years of assessing each applicant one dollar as a guaranty of good faith and conduct, to be returned at the close of the term if all requirements had been faithfully carried out by the pupils, was abolished. The testimony of teachers acquainted with this plan is that a mistake was made in abolishing this rule.

Free books were furnished to all pupils, which is considered a move in the right direction; for the tax upon pupils in furnishing the necessary books was, in most cases, burdensome, as the school life of this class was not more than eight weeks.

ENROLLMENT, ATTENDANCE, ETC., IN EACH SCHOOL.

	Total Enrollment including duplicates on account of transfers.	Average Membership	Average Attendance.	Number of Teachers, June 30, '10.
Bagley	714	321	303	7
Barstow	1103	577	539	14
Bellefontaine	824	458	431	12
Bellevue	248	134	126	3
Bishop	2425	1149	1082	45
Brownson	459	287	273	7
Campbell	436	244	228	6
Cass	2014	956	916	23
Chaney	591	278	256	6
Clay	750	341	322	9
Clinton	804	426	398	9
Craft	389	198	182	4
Custer	114	65	60	2
Duffield	1426	785	733	18
Everett	1062	511	484	13
Farrand	623	316	293	7
Ferry	400	172	158	6
Firnane	575	274	253	6
Franklin	532	473	454	12
Garfield	360	160	157	4
Gratiot	133	81	77	2
Hancock	334	198	185	5
Hickey	104	64	59	2
Houghton	993	462	434	14
Hubbard	477	275	263	7
Irving	1146	608	576	15
Jackson	443	220	206	6
Jefferson	1516	757	706	18
Johnston	360	202	190	4
Lincoln	459	171	152	4
Livernois	100	58	52	2
McKinstry	401	200	186	5
Newberry	552	282	263	8
Nichols	535	293	274	7
Norvell	1088	603	580	14
Normal	135	55	52	4
John Owen	571	453	429	9
Pitcher	1102	601	566	14
Potter	281	109	101	5
Russell	775	344	323	9
Tappan	1911	733	704	18
Tilden	1064	573	539	15
Trowbridge	410	157	150	11
Van Dyke	582	339	321	10
Washington	583	580	541	14
Webster	1832	801	744	21
Wilkins	970	446	426	13
Ungraded	241	67	51	1
High	1042	780	754	33
Special teachers				7
Totals	30,848	15,735	14,640	401

The sum of the enrollment in all the schools, including transfers from one school to another or from one room to another in the same school, is as shown above 30,848

Deduct on account of duplicate enrollments 14,932

Actual number of different names enrolled in all the schools during the year 15,916

STATEMENT OF PROMOTIONS (HALF YEARLY) FOR THE SCHOOL YEAR ENDING JUNE 30, 1890.

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent. of promotions.	Average number belonging.	Whole number of promotions.	Per cent. of promotions.	Average Number belonging.	Whole number of promotions.	Per cent. of Promotions.	Average number belonging.
Bagley				487	75	323	487	75	323
Barstow	450	77	291	495	90	276	945	83	567
Bellefontaine	176	85	104	570	80	354	746	81	458
Bellevue				216	81	134	216	81	134
Bishop	667	77	431	1063	74	718	1730	75	1149
Brownson				443	77	287	443	77	287
Campbell				307	63	244	307	63	244
Cass	880	77	569	677	87	387	1557	81	956
Chaney				365	65	278	365	65	278
Clay	68	97	35	575	94	306	642	94	341
Clinton	47	94	25	553	89	401	600	70	426
Craft				266	67	198	266	67	198
Custer				79	61	65	79	61	65
Duffield	475	75	315	706	75	470	1181	75	785
Everett	218	63	174	509	76	337	727	71	511
Farrand	175	88	100	307	71	216	482	76	316
Ferry	9	75	6	211	63	166	220	64	172
Firnane				389	71	274	389	71	274
Franklin	83	90	46	387	85	227	470	86	273
Garfield	16	80	10	267	84	159	283	83	169
Gratiot				115	71	81	115	71	81
Hancock				314	80	198	314	80	198
Hickey				86	67	64	86	67	64
Houghton	200	74	135	516	79	327	716	78	462
Hubbard				459	84	275	459	84	27
Irving	539	75	361	436	88	247	975	80	608
Jackson				344	78	220	344	78	220
Jefferson	499	72	346	618	75	411	1117	74	757
Johnson				316	75	209	316	75	209
Lincoln	45	80	28	485	70	343	530	71	371
Livernois				85	65	58	85	65	58
McKinstry				256	64	200	256	64	200
Newberry	80	77	52	337	73	230	417	74	282
Nichols				512	87	293	512	87	293
Norvell	207	91	114	737	70	489	944	78	603
Normal				86	78	55	86	78	55
John Owen	81	90	58	506	64	395	587	65	453
Pitcher	353	81	218	390	51	383	743	62	601
Potter				138	63	109	138	63	109
Russell	43	83	26	455	71	318	498	72	344
Tappan	448	75	300	646	75	433	1094	75	733
Tilden	247	71	173	634	79	400	881	76	573
Trowbridge	142	81	87	91	65	70	233	74	157
Van Dyke	154	83	93	370	75	246	524	77	339
Washington	421	80	263	504	80	317	925	80	580
Webster	522	78	335	938	84	557	1460	82	892
Wilkins	251	98	128	624	98	319	875	98	447
Totals	7495	78	4823	19,869	75	13,067	27,365	76	17,890

NOTE.—The High and Ungraded Schools are not included.

GENERAL SCHOOL STATISTICS FOR THE SCHOOL YEAR ENDING JUNE, 1890.

1.	Population of the city of Detroit (census of 1890)	205,876
2.	Valuation of the property of the city of Detroit (assessed at full value)	$156,505,790.00
3.	Amount of levy for all municipal purposes	2,236,463 54
4.	Amount of levy for the current expenses of the public schools	326,032.00
5.	Amount of levy for school sites and buildings	134,000.00
6.	Amount of levy for all school purposes	460,032.00
7.	Per cent. of school taxes upon the entire municipal levy	20.5
8.	Amount of money received from the Primary School Fund	83,482.72
9.	Whole cost of superintendence and instruction, including evening schools and Ungraded School...	307,481.87
10.	Whole cost of incidentials, including all current school expenses, except those named in 9, above.	112,556.71
11.	Amount paid for sites and new buildings	115,438.07
12.	Number enrolled in the public schools from every 100 counted in school census	37.9
13.	Average weeks of membership of each pupil enrolled	31.3
14.	Average weeks of attendance of each pupil enrolled	29.5
15.	Average salary of all teachers, including principals, first assistants, etc	616.18
16.	Average salary of all teachers, excluding principals, first assistants, etc	541.60
17.	Total cost of tuition in night schools	8,947.00
18.	Total cost of tuition in Ungraded School	3,650 00
19.	Per cent. of promotions on average membership	76

GENERAL SCHOOL STATISTICS FOR THE THREE DEPARTMENTS, FOR THE SCHOOL YEAR ENDING JUNE 30, 1890.

		Primary Grade.	Grammar Grade.	High School.	Totals and Averages.
1.	Number of different names enrolled in each department and in all the schools	17,569	9,160	1,042	23,916
2.	Average membership of the schools for the year	13,134	4,823	778	18,735
3.	Average daily attendance for the year	12,295	4,597	754	17,646
4.	Per cent. of attendance on membership	93.4	95.3	96.9	94.1
5.	Number of pupils in membership at the close of the school year	12,371	4,530	751	17,652
6.	Number of men teachers during the school year, including the Superintendent	.....	11	8	22
7.	Number of women teachers during the year	.....	.....	.....	470
8.	Average number of teachers during the year, excluding the Superintendent and special teachers	285	154	31	471
9.	Average number of teachers for the year, including specials	.....	.....	.....	478
10.	Average number of pupils to the teacher, exclusive of special, based on average membership	46	29	24	40
11.	Cost of education *per capita* for instruction and superintendence	$12.72	$20.18	$38.81	$15.92
12.	Cost of education *per capita* for incidentials, based on average membership	6.00	6.00	6.00	6.00
13.	Cost of education *per capita*, including all current expenses, except interest on money invested in school property	18.72	26.18	44.00	21.92
14.	Cost of education *per capita* for instruction in the Ungraded School	.....	.....	.....	54.50

The following table exhibits the number of sittings in each school building and the number of rooms in which pupils are seated under the charge of one teacher.

SCHOOLS.	No. of Rooms.	No. of Sittings.
Bagley	6	366
Barstow	12	617
Bellefontaine	10	520
Bellevue	3	152
Bishop	22	1237
Brownson	6	307
Campbell	6	300
Cass	20	1020
Chaney	6	331
Clay	8	413
Clinton	8	455
Craft	4	243
Custer	2	125
Duffield	16	880
Everett	12	656
Farrand	6	375
Ferry	4	226
Firnane	6	363
Franklin	6	340
Garfield	4	207
Gratiot	2	98
Hancock	4	234
Hickey	2	187
Houghton	12	591
Hubbard	6	334
Irving	12	667
Jackson	6	302
Jefferson	16	822
Johnston	4	222
Lincoln	8	449
Livernois	2	99
McKinstry	4	241
Newberry	6	322
Nichols	6	343
Norvell	12	650
Normal	4	128
John Owen	8	449
Pitcher	12	603
Potter	6	205
Russell	8	433
Tappan	16	874
Tilden	12	647
Trowbridge	10	620
Van Dyke	8	424
Washington	12	631
Webster	20	1019
Wilkins	12	644
Ungraded	3	85
High	4	743
Totals	404	22,285

The following table shows the different salaries paid per school month and the number of teachers to whom certain salaries are paid, according to the pay-roll of June, 1890.

14	Teachers	at	$ 12 00
29	"	"	30 00
38	"	"	35 00
36	"	"	40 00
32	"	"	45 00
53	"	"	50 00
32	"	"	52 50
11	"	"	55 00
24	"	"	57 50
11	"	"	60 00
12	"	"	65 00
101	"	"	70 00
1	"	"	75 00
13	"	"	77 50
28	"	"	80 00
2	"	"	82 50
10	"	"	85 00
10	"	"	90 00
6	"	"	100 00
5	"	"	120 00
1	"	"	125 00
10	"	"	130 00
2	"	"	140 00
2	"	"	150 00
3	"	"	160 00
1	"	"	250 00
3	"	"	200 00
1	"	"	180 00

SCHEDULE OF ANNUAL SALARIES OF TEACHERS.

HIGH SCHOOL.

Principals, grade principles and teachers at the head of special departments, as agreed upon.

Other Assistants in the High School—

For first year of service	$ 600 00
For second year of service	650 00
For third year of service	700 00
For fourth year of service	750 00
For fifth year of service	800 00

Regular rates for primary and grammer school teachers.

For first year of service in the Detroit Public Schools	$ 350 00
For second year of service in the Detroit Public Schools	400 00
For third year of service in the Detroit Public Schools	450 00
For fourth year of service in the Detroit Public Schools.	500 00
For fifth year of service in the Detroit Public Schools	550 00
For sixth year of service in the Detroit Public Schools	600 00
For seventh year of service in the Detroit Public Schools	650 00
For eighth year of service in the Detroit Public Schools	700 00
For ninth year of service in the Detroit Public Schools and after	725 00
First Assistants in buildings of twelve or more rooms, per year	800 00
Teachers of half-day schools having more than seventy-four pupils in attendance, in addition to regular rates, per school month	5 00

PRINCIPALS.

Principals of schools of less than six rooms, $800 per year; of six rooms, $850; of eight rooms, $900; from nine to eleven rooms, $1,100; from twelve to fourteen rooms, $1,300; from fifteen to seventeen rooms, $1,600; of eighteen or more rooms, $2,000.

In case one or more rooms shall be unoccupied in any building of six or more rooms, $2.50 shall be deducted from the monthly salary of the principal for each unoccupied room.

REPORT OF THE PRINCIPAL OF THE HIGH SCHOOL.

REPORT OF THE PRINCIPAL OF THE HIGH SCHOOL.

DETROIT, MICH., July 2, 1890.

To W. E. Robinson, Superintendent:

DEAR SIR.—I beg herewith to submit my annual report as Principal of the High School.

The year just completed has been a comparatively uneventful one. The full report submitted one year ago makes any extensive report unnecessary at this time.

The year opened with a remodeled building and with the addition to our corps of three new teachers. Another teacher was added at the beginning of the second semester. This addition to the teaching force was made necessary by the growth of the school. I am glad to say that the school has gained much by the character of those appointed. The continued growth will probably make another teacher necessary at the beginning of the coming year.

CHANGES IN COURSE.

The changes in the course of study made a year ago have now had one year's trial. The result is generally satisfactory. It is feared, however, that the requirements in some parts of the course may be too heavy. If this proves true, a few modifications will remove the difficuity.

GROWTH OF THE HIGH SCHOOL.

The growth of the school referred to a year ago has continued. The following table shows the total number

enrolled for each year from that ending June, 1883, to that ending June, 1890:

June 1883	702
" 1884	743
" 1885	784
" 1886	839
" 1887	833
" 1888	859
" 1889	953
" 1890	1042

The following table shows the actual "number belonging" at the end of the first school month of the second semester, the time of the year when the school is usually about the fullest.

February 1883	611
" 1884	589
" 1885	634
" 1886	689
" 1887	666
" 1888	703
" 1889	797
" 1890	858

This growth must continue. Below will be found suggestions as to providing accommodations for the increased number in the High School.

EXAMINATIONS AND MARKING.

We still retain the system of examination described in last year's report, except that now the written examinations are held without previous announcement and at regular class times. The unwholesome "cramming" for examinations, so common, cannot be done, if it is not known when the examination is to take place. At the same time the examination is a genuine test of the student's progress.

RELATIONS WITH PARENTS.

A constant effort has been made to receive a thorough understanding between teachers and parents. Whenever a student shows signs of failure in his work his parents are notified. We state that so long as nothing is heard from us parents may assume that work is satisfactory. We have had frequent teachers' meetings for the discussion of the work of students. The coming year these will be held regularly every two weeks. Our past experience leads us to expect excellent results from the meetings. Something of the kind is absolutely necessary in a school where work is so thoroughly specialized as it is here.

PROMOTIONS.

It has been complained during the past year that too large a number of students of the Ninth Grade fail of promotion, and also that too great a difference exists between the membership of the Ninth Grade and the membembership of the Twelfth Grade.

In considering the question of promotion several things must be considered. In the first place it must be understood that there are four studies in each of the classes of the Ninth Grade. A student in order to be promoted from the B. Class to the A, must have passed in three of the four studies; and, in order to be promoted from the Ninth Grade to the Tenth, one must have passed in seven of the eight studies of the Ninth Grade. Even if a student fails to pass in two studies in the B. Ninth, and fails of promotion, he still goes on in those studies in which he has passed. If he fails in but one study he goes on in the A. Class work in the other three and repeats only the one in which he has failed. It will therefore be seen that failure of promotion does not mean so much as it does when a system of averaging prevails, as it does generally in lower grade work. There can be no logical rea-

son why a student who fails in Latin, or in Algebra, should be kept back in other subjects, and hence a plan similar to that one described exhists in most High Schools. Still, a promotion should indicate a certain amount of work done. The best rule, perhaps, for all grades would be the one we enforce with regard to promotion from the Tenth to the Eleventh Grade, and in all subsequent classes. Here we require that a student shall have completed an amount of work equal to that required in any regular course in the classes below the Eleventh. But in the lower grades we have promoted even if failure had been made in one study, of course requiring that study to be taken subsequently, except in the few cases where students drop from the regular course and become specialists.

Under any system of promotion on averages, many students must be promoted who are very weak in some line of work. In looking over old records of entrance examinations we find that many students have been admitted simply because a high standing in spelling counterbalanced low standings in other subjects. Such students almost always fail in some of their work in the High School. Could anything else be expected? Some such fail in all studies, others fail in all but one; but it must be remembered that if they fail badly in all but one study they are permitted to go on in that study. It has seemed wise to state the above facts in full, as many persons have gained the idea that a failure to pass in one study means a failure to pass in all; and that a failure of technical promotion from the B. Class to the A. Class at the end of the first semester in the High School means a total failure, while it may mean simply a failure in two subjects with success in two more.

IMPROVEMENTS IN THE BUILDING.

During the summer of 1889 extensive improvements were made in the High School building. The disgraceful sanitary condition of the building was, in large part, remedied. New and improved water closets were constructed, which are connected with ventilating shafts in such a way as to make them as little objectionable as possible. Much was done toward securing satisfactory ventilation for part of the building. Chemical tests have been made which show that the air in the rooms affected is much better than before the improvements were made. In the large Ninth Grade Assembly Room the ventilation is astonishingly good, although the supply of fresh warmed air is not yet so large as it should be. Several rooms were added by the utilization of former waste space and by re-dividing some parts of the building. Commodious chemical and physical laboratories were provided in the basement, asphaltum floors and indirect radiation securing perfect dryness and satisfactory ventilation. The library room was enlarged but is still almost too small for its use. A room for the Principal has been provided, but it is almost absolutely without furnishings, and the lack of "places to put things" necessitates an untidiness that is certainly discreditable, and is a bad example to such students as may visit the room.

On the whole, however, the building in its present condition is not a bad one for its purpose. For practical school work it is much better than many buildings of real elegance that are the pride of so many towns. But even with the additional room that we shall have when the offices of the Secretary of the Board of Education and the Superintendent of Schools are removed, we shall soon be cramped for room again. Our enrollment for the past year has been 1054; it will doubtless be 1200 or more during the year to come. The actual membership of the

Ninth Grade alone in the fall cannot be less than 450, and at the beginning of the second semester it must be more than 500. For this number of students we have a room that saets 352. A portion of the "overflow" can be accommodated in the Tenth Grade assembly room. It will, however, be necessary to seat two of the recitation rooms with deeks at least for the second semester of the coming year.

One of the great difficulties to be encountered is the disproportion of space allotted the Tenth Grade as compared with the other grades. The assembly room for this grade occupies the third story of the new or south part of the building. There are on this floor but six recitation rooms.

The result of this limitation is that several classes from this grade must recite on other floors. During the first semester of the year 1890-91 not less than five regular Tenth Grade recitations must be held on the first floor of the building, and at least three on the second floor. The recitation rooms available for this work are in the north part of the building on the first floor, while the assembly room is in the south part of the building on the third floor. Students in going back and forth must traverse a distance as great as some city blocks, besides ascending or descending two long flights of stairs. The loss of time and the waste of energy involved are readily apparent.

NEEDED ADDITIONS.

It is suggested that an additional story be placed on the old northern part of the building, which is now but two stories in height. I am told by the Supervisor that since the strengthening of the foundation of that part of the building this is perfectly practicable. In this addition there would be room for one assembly room which would seat about 200, and for at least six recitation rooms. The

present Tenth Grade assembly room would then be used for the B. Class of the Ninth Grade, the new assembly room for the A. Class, and the present Ninth Grade room would be used for the Tenth Grade. This would place the Tenth Grade near the Eleventh, while the A. Class of the Ninth would be nearer the Tenth than at present. With a very simple arrangement of stairways, students going from the Tenth to recitations in the Eleventh would have only a partial flight of stairs to descend, and students in the Ninth only a partial flight to recitation in the Tenth Grade; and of course the reverse is true. There always must be a close interlocking of successive classes. This going back and forth will always be to a considerable extent necessary, but the arrangement suggested would reduce the ratio of climbing to a minimum. These changes would give us an assembly room seating 200, and six or seven additional recitation rooms. It is also possible to fit up three additional rooms in the basement in the east side of the building. This would give a building that would accommodate 45 teachers, as large a number as the growth of the school would make necessary for several years to come.

While the present location has many objections, its central location must make it as desirable as any for a single school. It is even better than anything that could be devised for two schools. As pointed out in my report of a year ago, the future will doubtless demand three schools in Detroit. It is probable that some steps should be taken soon toward establishing a branch school in either the western or the northern part of the city. This should be planned so as to develop gradually into a complete school. It would be unwise, however, for some time to divide the High School so far as the upper grades are concerned; and a branch school for the Ninth and Tenth Grades should be identical with the present school in its courses of study and general plan of management.

Yours respectfully,

FREDERICK L. BLISS.

TABLE SHOWING NUMBERS IN DIFFERENT BRANCHES, FIRST AND SECOND SEMESTERS 1889-90.

STUDIES.	NO. OF COURSES	FIRST SEMESTER.								SECOND SEMESTER.							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Algebra		245	180		20					296	177	77	26				
Arithmetic		106								121							
Book-Keeping		13	13	3	10					17	11	9					
Botany										106							
Chemistry		33								54							
Commercial Law										5							
English		214	21-64		12	9				233	22-64	50	12	7			
English Literature		38	13	16						42	27	14					
French		31	41	8	17	6	16			23	23	24	11	10			
Geometry		65	62	51	17					58	22	40	24				
German		25	23	20	22	4				39	42	21	24				
Greek		9		4						13	8		3				
History		107	42	81	30	31				143	94	69	58				
Latin		88	67	50	35	16	11	16	3	131	80	64	49	41	14	10	15
Physics		98	81							97		77					
Physiology		147								129							
Psychology		22								17							
Reading		203	139	38-53 65	49					238	158		75				
Zoology		98															

TABLE SHOWING THE ENROLLMENT BY COURSES, FIRST AND SECOND SEMESTERS 1889-90.

GRADE.	CLASSICAL COURSE.		LATIN COURSE.		SCIENTIFIC COURSE.		COMMERCIAL COURSE.		ENGLISH COURSE.		NUMBER PROMOTED		NUMBER NOT PROMOTED.		NUMBER LEFT.		NUMBER ENROLLED.	
	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.	1st Term.	2nd Term.
9 B. Regular	3	11	62	75	21	47	30	22	127	111	106	155	84	64	53	47	443	226
9 B. Special			1				...		6	9	2	5	1	4	1	1	6	10
9 A. Regular	6	6	59	44	15	10	13	18	58	65	99	85	36	33	16	14	151	142
9 A. Special			2	1					5	10	2		3	8	2	2	7	11
10 B. Regular	13	8	23	40	1	17	13	14	43	55	54	81	32	34	10	19	96	134
10 B. Special			3	3			1	1	12	9	5	3	6	5	5	5	16	22
10 A. Regular	6	16	30	20	4	4	5	9	29	39	40	63	20	13	9	12	75	88
10 A. Special				1		1			13	11	3	2	8	4	1	8	12	14
11 B. Regular	7	14	11	15	1	4	5	5	39	32	39	47	22	15	11	8	63	70
11 B. Special									12	12	3	1	3	4		7	12	12
11 A. Regular		4	8	7	1	3	5	6	25	27	24	32	10	9	6	6	39	47
11 A. Special							...		5	5			4	3		2	5	5
12 B. Regular	4	2	11	13	5	4	1	3	42	32	15	32	28	17	1	5	44	54
12 B. Special									15	7			5	2	10	5	15	7
12 A. Regular		2	4	6	2	1	1	...	26	7	31	16	1		1		33	16
12 A. Special							...	...					...	...	...	...		
Past Graduates							* 17	* 10			17	10						10
Total	39	63	213	226	50	101	74	78	426	431	445	512	265	265	124	142	834	899
Number Graduated		2	4	9	2	3	1	2	24	20	...						31	36

* Scattered.

APPENDIX TO REPORT OF SUPT. OF SCHOOLS.

OUTLINE OF THE COURSE OF STUDY

FOR

PRIMARY AND GRAMMAR GRADES.

B. CLASS. FIRST GRADE.

LANGUAGE.—Oral lessons in Teacher's Edition of Mrs. Knox's Elementary Lessons in English, pp. 19-25, inclusive.

SPELLING.—By sound and by letter, the words in reading lessons; also teach the use of the words.

READING.—Forty pages of chart and XV lessons of National First Reader, with familiar words in sentences on the blackboard. A large amount of supplementary reading can be obtained from exercises in applied work in numbers.

NUMBERS.—By means of objects, all combinations from 1 to 7, inclusive. Counting objects to 50, and Roman notation to eleven.

See detailed course in numbers.

WRITING.—Slates of proper size ruled with slate rulers; pencils long and well sharpened; correct position of body, feet and arms, with pencil pointing over right shoulder, and wrist up from the desk.

First two weeks.—Thorough drill upon simple exercises to secure freedom of motion and control of the pencil. Make the letters i, u, w, n, m, v, x, o, e, c, a, two spaces

high, and r, s, two and one-half spaces high in first practice. Complete alphabet of small letters by the close of the twelfth week. Begin writing words as soon as enough letters have been learned to make a word. Do not allow children to write words in which there are letters that have not been given in a writing lesson. Take up the capitals at the beginning of the thirteenth week, in groups, as follows:—O, D, C, E, A; N, M, H, K; I, J; X, W, Z, Q; V, U, Y; T, F, P; S, L, G; B, R.

Use counting exercises when they are helpful.

Allow no careless work at any time.

Time for lesson, twenty minutes, daily.

MUSIC.—Scale and interval drill; rote songs for recreation and to establish a proper use of the voice. For interval drill see Veazie's Primer. For rote song select those of high rather than low pitch.

DRAWING.—After pupils have become familiar with terms of place, as, left, right, upper, lower, centers of sides, upper l. hand corner, upper r. hand corner, etc., form lessons from the sphere, cube and cylinder developing surface, point and line should be given, as shown in Primary Manual, pp. 30-38.

The drawing in this class is to be done both on slates and blackboard.

Teach expression of form in three ways: by Making, by Drawing, and by Language.

Combinations of splints into simple figures should be practiced weekly after drawing begins, using some of the exercises for object lessons.

Lessons in clay modeling should be given weekly in connection with the form lessons from solids.

The square and circle may be modeled in bas-relief upon clay tablets.

For order of work refer to Primary Manual, pp. 30-68.

Daily lessons of twenty minutes each.

A. CLASS. FIRST GRADE.

LANGUAGE.—Review B. Class course, and in advance take pp. 26 to 33, inclusive, of Mrs. Knox's Elementary Lessons in English.

READING.—National First Reader and the chart completed. Prepare a variety of lessons for supplementary reading on blackboard and paper, using familiar words that will develop intelligent reading. All new words in each lesson should be placed upon the blackboard and thoroughly mastered before the lesson is assigned for reading.

SPELLING.—Spell all words in the reading lessons orally and in writing, and teach their use.

NUMBERS.—Review B. Class course, and in advance, by means of objects and by applied examples, master all combinations from 8 to 13, inclusive. Count objects to 100; Roman notation to twenty-five.

See detailed course in numbers.

WRITING.—Perfect position at desk whenever any writing is done. Slate always in position with pencil pointing over the right shoulder.

First two weeks thorough drill upon simple exercises with counting. Count fast enough to secure a good, easy writing motion.

Review small alphabet. Begin writing capitals third week of term. Write words and sentences beginning with capitals.

Allow no capitals used, in any work, different from those given in the writing lesson.

Use blackboard freely. Teachers should never allow themselves to do any careless work upon the boards at any time.

Time, twenty minutes daily.

MUSIC.—Scale and interval drill.

Time—Children should be taught to beat the time. Two, three and four part measures, having one note for every beat, and one note for every measure.

Rests.

Simple staff exercises, mostly in key of G. Teacher to report the number of pupils who can sing the scale and those who cannot.

DRAWING.—Teach expression of form by Making, by Drawing, and by Language.

Clay modeling of type forms and simple objects based upon them to be practiced weekly.

Attention to paper folding.

Combinations of square, circular and triangular tablets into decorative forms.

Drill exercises in free movement of hand and arm to precede each lesson.

The work of this grade is to be done on paper and blackboard. One-fifth of pupils should work at blackboard each day.

Order of lessons in Primary Manual, pp. 68-100.

Daily lessons of twenty minutes each.

B. CLASS. SECOND GRADE.

LANGUAGE.—Review the First Grade course, and in advance, pp. 34 to 36, inclusive of oral lessons from Teacher's Edition of Mrs. Knox's Elementary Lessons in English.

SPELLING.—Spell all words in reading lessons orally and in writing, and define them.

READING.—National Second Reader to page 86, with supplemental reading from matter corresponding to the Frst Grade work.

NUMBERS.—Review all work of previous classes, and in advance, by means of objects and applied examples,

master all combinations from 1 to 18, inclusive; then apply this knowledge to subtraction.

Read and write numbers to 1,000; Roman notations to correspond with reading lessons.

See detailed course in numbers.

WRITING.—Perfect positions. Correct pencil holding. Show the exact position of hand, fingers and pencil and insist upon every one doing this part of the work.

Practice book No. 1; lead pencils, (Faber's No. 3 or Dixon's M.)

First two weeks of term use simple drill exercises, giving more attention to position and pencil holding and free movement than to the exact forms of letters. Do not allow any careless work at any time. Use blackboard freely. Send a portion of the class to the board each day. Criticise the work on board. Ask pupils to criticise one another's work. Review small and capital letters in words and sentences.

Write specimens at beginning of each month, keeping first one written to compare with last. Send others home.

Time, twenty minutes daily.

MUSIC.—Interval practice continued. Exercise pupils daily in practice upon the ladder and with manual signs in key of C. or D. Teach the pitch names, a, b, c, d, e, f, g.

A few more simple varieties of two, three, four and six part measure. Exercises from the staff to illustrate what is known of time and tune.

DRAWING.—Teach expression of form by Making, by Drawing, and by Language.

Clay modeling, tablet laying, and paper folding as directed by special teacher.

Careful attention to the analysis of form. Drill exercises in free movement to precede each lesson.

Lines of definite lengths carefully considered.

The drawing of this class to be done on blackboard and paper. One-fifth of pupils working at blackboard each day.

Order of work given in Primary Manual, pp. 107 to 167.

Daily lessons of twenty minutes each.

A. CLASS. SECOND GRADE.

LANGUAGE.—Review course of previous classes.

Advance work:—Oral lessons from Teachers' Edition of Mrs. Knox's Elementary Lessons in English, pp. 33 to 36, inclusive.

SPELLING.—Spell all words in reading lessons orally and in writing, and define them.

READING.—National Second Reader completed. Supplemental reading from matter corresponding to First Grade work.

NUMBERS.—Review work of previous classes. Make all possible combinations of two figures under 100. Column addition of four figures only, using the digits 1, 2, 3, 4 and 5. Read and write numbers to 10,000. Multiplication table to 36 as a multiple. The idea of fractions developed. Roman notation to correspond with reading lessons.

WRITING.—Practice-book No. 1; Spencer's New Primary Writing Cards; lead pencils, Faber's No. 3, or Dixon's M.

Blackboard work and specimens same as Class B.

First two weeks of term use drill exercises; do but little work upon letters. Get everybody ready for work. Review both alphabets in words and sentences. We are

now getting ready for pens and ink and very careful attention should be given to *position*, *pencil holding* and freedom of movement.

Allow no careless work at any time.

Time, twenty minutes daily,

MUSIC.—Review the work of the preceding classes. A little more advanced work upon the staff. Position of do in keys of C, D and G, recognized in modulation.

DRAWING.—Teach expression of form by Making, by Drawing, and by Language.

Paper cutting and pasting.

Paper folding and tablet laying continued. Clay modeling as directed. Careful attention to free movement.

No. 1 Drawing-book, with accompanying Manual, to be used in this grade.

Daily lessons of twenty minutes each.

B. CLASS. THIRD GRADE.

LANGUAGE.—Lessons 1 to 18, inclusive of Hyde's Practical Lessons in English.

SPELLING.—Define all new words in reading lessons, and spell them orally and in writing.

READING.—National Third Reader to p. 116. Supplemental reading from selections corresponding to second grade work.

NUMBERS.—Review work of previous classes. Continue column addition of four figures. Read and write numbers in two periods.

Roman notation to correspond with reading lessons.

Subtraction without carrying.

Multiplication table treated exhaustively through 72 as a multiple.

much miscellaneous writing. Avoid working too slowly in practice books or too rapidly when doing other work, as writing spelling lessons.

Specimens at beginning of each month.

Time, twenty-five minutes daily.

MUSIC.—In addition to the work of the preceding term, keys of C, G, D and E studied. Let the work be a developing process, and keep close relationship between lessons, each being a step in advance of the last. Begin two-part singing. The time should always be beaten steadily and the pupils know with which beat the commencing note of each phrase or section is to be sung.

DRAWING.—Continued daily attention to the analysis of form.

Reversed curves. Vase forms.

Paper cutting and pasting continued.

Attention to made work as directed.

Drill lessons in free movement continued.

Daily lessons of twenty minutes.

No. 3 Drawing Book, with accompanying Manual.

B. CLASS. FOURTH GRADE.

LANGUAGE.—Review previous courses. Lessons 1 to 27, inclusive, of Part II of Hyde's Practical Lessons in English. Simple letter writing from dictation. Insist upon the use of correct language in all lessons and in speech.

SPELLING.—Spell and define all new words in reading lessons.

READING.—National Fourth Reader to page 149. Supplemental reading from selections corresponding to Third Grade work. Insist upon correct reading from all other text books used in this class.

NUMBERS.—Review work of previous classes.

Selections from Robinson's Beginners Book in Arithmetic, pp. 90 to 146, and other supplemental arithmetics. Arabic notation and numeration to 1,000,000,000. Multiplication table completed. Continue drill in rapid column addition of six figures. Continue work in Fractions. Abundant exercises in applied numbers in Addition, Subtraction, Multiplication and Division, (divisors not to exceed 30).—Use statements.

See Detailed Course in Arithmetic.

GEOGRAPHY.—The World and Physical Geography of North America.

WRITING.—Practice-book No. 1. Copy-book No. 2.

First two weeks of term use drill exercises. Complete first ten pages of copy-book by close of tenth week of term. Finish copy-book by close of nineteenth week of term. Mark each page of copy-book when the page is finished. Write three pages in practice book to one in copy-book.

Specimens at beginning of each month.

Time, twenty-five minutes daily.

MUSIC.—Review the work of the preceding classes. Try to select exercises and songs to illustrate previous drill in tune and time. On page 4, boys and girls should alternate in reading and singing the exercises; afterwards individual pupils should be called upon to sing them.

DRAWING.—Work the same as in Class A. Third Grade, with broader application and better expression of form.

A. CLASS. FOURTH GRADE.

LANGUAGE.—Complete and review Hyde's Practical Lessons in English. Continue simple letter writing; good form as to capitals and punctuation. Insist upon

correct language in all lessons and in speech. It is not enough that pupils merely commit the rules to memory; see that they have a clear conception of their meaning.

SPELLING.—Spell and define all new words in the reading lessons.

READING.—National Fourth Reader to page 284. Supplemental reading, as directed.

NUMBERS.—Review work of previous classes.

Selections from Robinson's Beginners' Book in Arithmetic, pp. 146 to end, and other suplemental arithmetic. Continue drill in rapid column addition of six figures. Abundant practice in applied numbers in the four fundamental processes. Use statements. Continue work in fractions. Simple applied work in all tables of denominate numbers, except Apothecary's Weight and Surveyor's Measure.

Simple form of bills.

GEOGRAPHY.—Political Geography of North America, and review.

WRITING.—Practice-book No. 2; Copy-book No. 2 B.

First two weeks of term drill exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Time, twenty-five minutes daily.

DRAWING.—Simple and reversed curves compared and contrasted.

Historic ornament introduced.

Paper cutting and made work continued with application to daily lessons.

Drill exercises in free movement.

No. 4 Drawing book with accompanying Manual, to be used.

Daily lessons of twenty minutes each.

MUSIC.—In addition to the work of the preceding term, the division of the beat introduced. Class should practice all major scales. They should be able to sing chromatic scales.

B. CLASS. FIFTH GRADE.

LANGUAGE.—Continue letter writing from dictation. Lessons 1 to 18, inclusive, of Reed & Kellogg's One Book Course in English.

SPELLING.—Spell and define all new words in advance of the reading exercise.

READING.—National Fourth Reader completed. Hooker's Book of Nature, Part I. Supplemental reading, as directed.

NUMBERS.—Review the four fundamental processes. White's Complete Arithmetic to page 63, and simple examples in Addition and Subtraction of Fractions. Denominators not to exceed 144. Obtain least common denominator by inspection. Omit L. C. M. and G. C. D. Thoroughly establish, by means of objects, the relation of a fraction to an integer. Use decimals in addition and subtraction.

GEOGRAPHY.—Section IX of detailed course.

South America completed.

Review previous courses.

WRITING.—Practice-book No. 2. Copy-book No. 3.

First two weeks of term movement dirill exercises, using muscular movement, be sure that all get the free, easy use of the forearm.

Copy-book through page 10 by close of the tenth week.

Complete copy-book by close of nineteenth week.

Write three pages in practice-book to one in copy-book.

Mark each page of copy-book when the page is finished.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Pupils of this grade should understand the signatures of all the major keys. Pupils should be able to write correctly all scales. Test exercises page 167, 168, 169, Second music reader, beating time, Time names and singing. More varieties of time. Begin drill in steps and half-steps.

DRAWING.—Conventionalization of leaves.

Natural forms of leaves analyzed.

Lilac and quince leaf pressed and pasted on copy in drawing books.

Other leaves studied.

Working drawings begun.

Special attention to *facts* of form and simple objects constructed according to plan.

Attention to original decorative work.

No. 5 Drawing-book with accompanying Manual, to be used.

Daily lessons of twenty minutes each.

A. CLASS. FIFTH GRADE.

LANGUAGE.—Lessons 19 to 36 of Reed & Kellogg's One Book Course in English. Review previous courses. Simple composition work in school ; reproductions. Letter writing.

SPELLING.—Patterson's Common School Speller, beginning with lesson XXXI, finish part II.

READING.—National Fifth Reader to p. 164, and Hooker's Book of Nature, part II, as supplemental reading.

NUMBERS.—Review previous course. White's Complete Arithmetic. Continue work in Addition and Substraction of Fractions, and include simple Multiplication and Division of Fractions, also Multiplication and Division of Decimals. In Division of Decimals, place the quotient above the dividend and make the divisor a whole number. Omit review prob—pp. 76, 77, 78, 79, 80, and 81.

Omitting Circulating Decimals and all puzzling and difficult examples. Give abundant simple practice in these subjects.

GEOGRAPHY.—Europe and review.

WRITING.—Practice-book No. 3; Copy-book No. 4.

First two weeks of term, muscular movement drill exercises.

Copy-book through page 10 by close of 19th week.

Mark each page of copy-book when the page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Same as Class B. Also the class should be able to sing any piece in the Second Reader.

DRAWING.—Same as Class B, with broader applications of principles and better expression.

B. CLASS. SIXTH GRADE.

LANGUAGE.—Lessons 37 to 52, inclusive, of Reed & Kellogg's One Book Course in English. Review previous courses. Continue composition work. Use Geogra-

phy and other sources for material. Letter writing continued.

SPELLING.—Patterson's Common School Speller, Lesson I to XXX, inclusive. Do not rely upon the author's definition; illustrate the meaning by using the words in sentences.

READING.—National Fifth Reader to page 307. Supplemental reading from selections in Fourth Grade work,

NUMBERS.—Through review of Addition, Substraction. Multiplication and Division of Common and Decimal Fractions, including L. C. M. and G. C. D. and U. S. Money.

White's Arithmetic to page 112.

GEOGRAPHY.—Asia, Africa and review.

WRITING.—Practice-book No. 3; Copy-book No. 5.

First two weeks of term muscular movement exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—This class should begin third series of charts. They should be taught to know the intervals to the extent of major and minor seconds and thirds. Perfect and augmented fourths, and perfect and diminished fifths. Difficult modulation. Gradually introduce all varieties of time.

DRAWING.—Special attention to constructive drawing.

Direct application of working drawing, according to a scale, in boxes and geometric solids made of cardboard, wood, etc.

Perspective representations of cylindrical objects.

The appearance of the cylinder in different positions with regard to the eye, thoroughly understood.

The study of natural and conventionalized leaf forms continued.

Decorative design more broadly treated.

No. 6 Drawing book, with accompanying Manual, to be used.

Daily lessons of twenty minutes each.

A. CLASS. SIXTH GRADE.

LANGUAGE.—Exercises in Composition and correct speech and letter writing, continued. Reed & Kellogg's One Book Course in English Lessons 53 to 62, inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Finish Part III and through Lesson XXVII of Part IV.

READING.—National Fifth Reader completed, with selections from Fourth Grade work as supplemental reading.

NUMBERS.—Review Common and Decimal Fractions. White's Complete Arithmetic to page 157. Omit Apothecaries' Weight. Selections from other authors upon these topics.

GEOGRAPHY.—Oceania and review.

WRITING.—Practice-book No. 3; Copy-book No. 6.

First two weeks of term muscular movement drill exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.
Specimens at beginning of each month.
Give frequent tests of speed.
Time, twenty-five minutes daily.

MUSIC.—A, E, B, minor scales. Chromatic scale. Practice singing accidentals.

DRAWING.—Same as Class B, with more independent work from pupils and broader application of principles.

B. CLASS. SEVENTH GRADE.

LANGUAGE.—Exercise in composition, correspondence and correct speech. Reed & Kellogg's One Book Course in English, Lessons 63 to 77 inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Lessons XXVIII to LXV, inclusive. Omit page 91.

READING.—Brief History of the United States, and the first fifteen chapters in Kellogg's First Book in Physiology and Hygiene. Each lesson in these subjects should be preceded by a clear and thorough explanation, and followed by such questions and talks as will insure a full understanding of the subject matter by the pupils.

NUMBERS.—Review Common and Decimal Fractions, Sixth Grade Course in General. White's Complete Arithmetic. Selections from other authors upon the subject, and Simple percentage, p. 185.
Omit Long. and Time and Metric System.

HISTORY.—Brief History of the United States through the Revolutionary War, according to Manual. Exercise pupils in writing a history of an event, or an epoch, in connection with language lessons.

WRITING.—Practice-book No. 3; Copy-book No. 7.
First two weeks of term muscular movement drill exercises.

Copy-book through page 10 by close of 10th week.

Complete copy-book by close of 19th week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Review Sixth Grade work, and take a little in advance. Pupils shall acquire one additional song in each major key.

DRAWING.—The work of this gaade should show a thoughtful application of the principles involved in Construction, Representation, and Decoration; to this end, teachers should criticise the work of pupils but not direct each step.

Working drawings continued, increasing the breadth of their application.

Pattern work of Geometric Solids introduced and objects made both from patterns and drawings, according to a scale.

Drawings should accompany all made work, showing an intelligent application of the working drawing, in the construction of simple objects.

Facts and appearances of objects contrasted and compared.

Independent work from pupils in grouping models and objects.

Laws of plant life carefully studied for purposes of decoration.

Modification of plant forms in the construction of bilateral units for surface decoration.

Original work required.

No. 7 Drawing-book to be used.

Daily lessons of twenty-five minutes each.

A. CLASS. SEVENTH GRADE.

LANGUAGE.—Exercise in composition, etc., as before. Reed & Kellogg's One Book Course in English. Lessons 78 to 97, inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Finish Part IV and through Lesson XXV of Part V.

READING.—Brief History of the United States, and complete and review Kellogg's First Book in Physioligy and Hygiene. Follow directions given in B. Seventh Course.

HISTORY.—Brief History of the United States, finished and reviewed.

NUMBERS.—White's Complete Arithmetic, page 185 to 222, Simplest forms of Stocks. Select examples from other authors, involving a review of the previous classes.

WRITING.—Practice-book No. 3; Copy-book No. 8.

First two weeks of term, muscular movement drill exercises.

Miscellaneous writing Notes, Receipts, Orders, Drafts, Checks, Business Letters, &c.

Specimens at the beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

B. CLASS. EIGHTH GRADE.

LANGUAGE.—Exercise in Composition, etc., as before. Reed & Kellogg's One Book Course in English, Lessons 98 to 109. Review previous courses.

SPELLING.—Patterson's Common School Speller to page 122.

READING—Selections from Appleton's Fifth Reader. Supplemental reading.

GOVERNMENT.—Manual, as prescribed.

NUMBERS.—White's Complete Arithmetic, pp. 222 to 275, omitting Annual Interest, Present Worth, Exchange and Equation of Payments.

GEOGRAPHY.—From the beginning through North America.

WRITING.—Same as A, Seventh Grade.

MUSIC.—All major and minor scales understood. All difficulties in time understood at a glance. Three and four part singing. Drill in exercises still necessary.

DRAWING.—Independent and rapid work required. Free-hand work insisted upon in all of representation.

The work of the grade includes:

1st. Construction.

(a) Applied working drawings.

(b) Problems in Geometry. The work being instrumental.

2d. Representation. Cylindrical and rectangular objects placed at angles of 90 and 45 degrees to the eye of the observer.

Grouping of models and objects.

3d. Decoration. Analysis of plant growth in Historical ornament.

The study of plant life.

The adaptation of growth in nature, to the use of bilateral units and surface decoration.

Application of principles in original work.

Made work required, as directed.

No. 8 Drawing-book to be used.

Daily lessons of twenty-five minutes each.

A. CLASS. EIGHTH GRADE.

LANGUAGE.—Exercises in Composition, Punctuation, etc., as before. Reed & Kellogg's One Book Course in English. Lessons 110 to 124, inclusive, and review of all courses.

SPELLING.—Patterson's Common School Speller. Review entire course.

READING.—Selections from supplemental reading.

NUMBERS.—White's Complete Arithmetic. Longitude and Time, Land, Ratio and Proportion, Involution, Evolution through Square Root, and applications, and review entire course in arithmetic. It is understood in these courses that only practical matter shall be selected, no puzzles should be assigned in any lesson. Select matter from any source practicably applicable to class and course.

GEOGRAPHY.—Subject completed.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

DETROIT HIGH SCHOOL—SCHEDULE OF COURSES OF STUDY.

NINTH GRADE.

CLASSICAL COURSE.	LATIN COURSE.	SCIENTIFIC COURSE.	ENGLISH COURSE,	COMMERCIAL COURSE.
B CLASS.	**B CLASS.**	**B CLASS.**	**B CLASS.**	**B CLASS.**
Algebra (1)	Algebra (1)	Algebra (1)	Algebra (1)	Algebra (1)
English (1)	English (1)	English (1)	English (1)	English (1)
Reading (1)	Reading (1)	Reading (1)	Reading (1)	Reading (1)
Latin (1)	Latin (1)	Latin (1)	Physiology (1)	Physiology (1)
Rhetorical work (1)	Rhetorical work (1)	Rhetorical work (1)	Rhetorical work (1)	Rhetorical work (1)
A CLASS.	**A CLASS.**	**A CLASS.**	**A CLASS.**	**A CLASS.**
Algebra (2)	Algebra (2)	Algebra (2)	Algebra (2)	Algebra (2)
English (2*a*)	English (2*a*)	English (2*a*)	English (2)	English (2)
Reading (2)	Reading (2)	Reading (2)	Reading (2)	Reading (2)
Latin (2)	Latin (2)	Latin (2)	Physics (1)	Physics (1)
Rhetorical work (2)	Rhetorical work (2)	Rhetorical work (2)	Rhetorical work (2)	Rhetorical work (2)

DETROIT HIGH SCHOOL — SCHEDULE OF COURSES OF STUDY.

TENTH GRADE.

CLASSICAL COURSE.	LATIN COURSE.	SCIENTIFIC COURSE.	ENGLISH COURSE.	COMMERCIAL COURSE.
B CLASS.	**B CLASS.**	**B CLASS.**	**B CLASS.**	**B CLASS**
Arithmetic (1)	Arithmetic (1)	Arithmetic (1)	Arithmetic (1)	Arithmetic (1)
Ancient History (1)	History (1)	History (1)	History (1)	History (1)
Reading (3*a*)	Reading (3*a*)	Zoology (1)	English (3)	English (3)
Latin (3)	Latin (3)	Latin (3)	Zoology (1)	Book-keeping (1)
Rhetorical work (3)	Rhetorical work (3)	Rhetorical work (3)	Rhetorical work (3)	Rhetorical work (3)
***A CLASS.**	**A CLASS.**	**A CLASS.**	**A CLASS.**	**A CLASS.**
Algebra (3) 15 weeks	Algebra (3) 15 weeks	Algebra (3) 15 weeks	Algebra (3) 15 weeks	Algebra (3) 15 weeks
Geometry (1) 5 weeks	Geometry (1) 5 weeks	Geometry (1) 5 weeks	Geometry (1) 5 weeks	Geometry (1) 5 weeks
Modern History (2)	History (2)	History (2)	History (2)	History (2)
Botany (1)	Botany (1)	Botany (1)	Reading (3)	Reading (3)
Latin (4)	Latin (4)	Latin (4)	Botany (1)	Book-keeping (2)
Rhetorical work (4)	Rhetorical work (4)	Rhetorical work (4)	Rhetorical work (4)	Rhetorical work (4)

DETROIT HIGH SCHOOL—SCHEDULE OF COURSES OF STUDY.

ELEVENTH GRADE.

CLASSICAL COURSE.

B CLASS.

Geometry (2)
Latin (5)
* Greek (1)
Rhetorical work (5)

A CLASS.

Geometry (3)
Latin (6)
Greek (2)
Rhetorical work (6)

LATIN COURSE.

B CLASS.

Geometry (2)
History (3)
Latin (5)
† Electives { French (1) / German ( )
Rhetorical work (5)

A CLASS.

Geometry (3)
History (4)
Latin (6)
† Electives { French (2) / German (2)
Rhetorical work (6)

SCIENTIFIC COURSE.

B CLASS.

Geometry (2)
History (3)
English Literature (1)
† Electives { French (1) / German (1)
Rhetorical work (5)

A CLASS.

Geometry (3)
History (4)
Chemistry (1)
† Electives { French (2) / German (2)
Rhetorical work (6)

ENGLISH COURSE.

B CLASS.

Geometry (2)
History (3)
English Literature (1)
† Electives { (a) English (4) / (b) French (1) / (c) German (1) / (d) Latin (1)
Rhetorical work (5)

A CLASS.

Geometry (3)
History (4)
Chemistry (1)
† Electives { (a) Eng. Lit (2) / (b) French (2) / (c) German (2) / (d) Latin (2)
Rhetorical work (6)

COMMERICIAL COURSE.

B CLASS.

Geometry (2)
History (3)
Book keeping (3)
† Electives { (a) English (4) / (b) French (1) / (c) German (1)
Rhetorical work (5)

A CLASS.

Geometry (3)
History (4)
Chemistry (1)
† Electives { (a) Eng. Lit. (1) / (b) French (2) / (c) German (2)
Rhetorical work (6)

DETROIT HIGH SCHOOL—SCHEDULE OF COURSES OF STUDY.

TWELFTH GRADE.

CLASSICAL COURSE.

B CLASS.

§ Physics (2) or (3)
Latin (7)
Greek (3)
Rhetorical work (7)

A CLASS.

§ Physics (2) or (3)
Latin (8) / Greek (4) — Alt'rn'te days
Algebra (4) 15 weeks / Geometry (4) 5 weeks
Rhetorical work (8)

LATIN COURSE.

B CLASS.

§ Physics (2) or (3)
Latin (7)
† Electives: French (3) / German (3)
Rhetorical work (7)

A CLASS.

§ Physics (2) or (3)
Latin (8) every other day
Algebra (4) 15 weeks / Geometry (4) 5 weeks
† Electives: French (4) / German (4)
Rhetorical work (8)

SCIENTIFIC COURE.

B CLASS.

§ Physics (2) or (3)
History (5)
English Literature (2)
† Electives: French (3) / German (3)
Rhetorical work (7)

A CLASS.

§ Physics (2) or (3)
Algebra (4) 15 weeks / Geometry (4) 5 weeks
† Electives: French (4) / German (4)
Rhetorical work (8)

ENGLISH COURSE.

B CLASS.

§ Physics (2) or (3)
History (5)
‡ Eng. Literature (2) or (3)
† Electives: (a) English (5) / (b) French (3) / (c) German (3) / (d) Latin (3)
Rhetorical work (7)

A CLASS.

§ Physics (2) or (3)
Physchology (1)
† Electives: (a) Algebra (4) 15 wks. / Geometry (4) 5 wks. — or — ¶ Algebra (4a) 10 wks / Trigonometry (2) 10 weeks; (b) French (4); (c) German (4); (d) Latin (4)
Rhetorical work (8)

COMMERCIAL COURSE.

B CLASS.

§ Physics (2) or (3)
History (5)
Commercial Law (1)
† Electives: (a) English Literature (2) / (b) French (3) / (c) German (3)
Rhetorical work (7)

A CLASS.

§ Physics (2) or (3)
Book-keeping (4) — or — ¶ Algebra (4a) 10 wks / Trig'nom'try (1) 10 wks
† Electives: (a) Eng. Literature or (3) Eng. (5); (b) French (4); (c) German (4)
Rhetoaical work (8)

The figure in parenthesis after the name of a study indicates the number of the course of that study. Thus, History (5), means Course 5 in History. The word "Course" in this connection means the work of one term in any study.

A detailed description of the various courses can be found in the catalogue. The number of the course in each study there corresponds to the number in parenthesis after the name on the schedule. See index of catalogue for each subject.

* Greek is begun in the Autumn only, unless there is a sufficient number wishing to begin Greek in January to warrant the formation of a class. Members of January classes wishing to take Greek should make special arrangements on completing the work of the B Class of the Tenth Grade. If they wait until the completion of the work of the B Class, Eleventh Grade, an extra term will be required for graduation.

† In the series of electives, one study must be taken each term, and those used with the same letter must be taken in successive terms. Thus, if (a) English is taken in the "B 11th," (a) English Literature must be taken the next term. If a foreign language is taken, two years' work will be essential to graduation.

‡ The English Literature work of the 12th Grade, B Class, English Course will depend on previous work. Those having completed Course 2, will take Course 3; while those having elected French, German, or Latin, will take Course 2.

§ Course 2 in Physics, including first half of text book, will be given the first term of the year only; and Course 3 including second half of text book the second term only. Both courses are required for graduation.

‖ Students expecting to go to College must take Mathematics. If they have before elected a foreign language, they may be excused from Psychology (1). See last sentence under †.

¶ Trigonometry must be taken by those expecting to enter any of the Engineering Courses at the University. Such students will take Algerbra (4*a*) iustead of Algerbra (4). Students in the Commercial Course expecting to take an Engineering Course at the University must take Mathematics instead of Book-keeping (4).

Text Books, Etc., Used in the Detroit Primary and Grammar Schools.

Barnes' New National Reader, No. 1.
" " No. 2.
" " No. 3.
" " No. 4.
" " No. 5.
Appleton's Standard Fifth Reader.
Barnes' Brief History of the United States.
Hooker's Book of Nature, Part I, Plants.
" " Part II, Animals.
" " Part III, Air and Water.
Kellogg's First Book in Physiology and Hygiene.
Appleton's Standard Higher Geography.
" " Elementary Geography.
Hyde's Practical Lessons in English--First Book.
One Book Course in English—Reed & Kellogg.
Mason's New Second Music Reader.
" Third "
Patterson's Common School Speller.
Robinson's Beginners' Book in Arithmetic.
White's Complete Arithmetic.
Harper's New Graded Copy Book, No. 1 (Primary).
" " No. 2 "
" " No. 3 "
" " No. 4 "
" " No. 5 "
" " No. 6 "
" " No. 7 "

Prang's Drawing Books, No. 1.
" " No. 2.
" " No. 3.
" " No. 4.
" " No. 5.
" " No. 6.
" " No. 7.
" " No. 8.

Paragon or other Practice Books, No. 1.
" " " " No. 2.
" " " " No. 3.
" " Scratch Blocks, 6 x 9.
" " " " 7 x 11.
" " " " 8 x 10.
" " " " 9 x 11½.
" " " " 9½ x 12.

Spelling Slips, double column.

Pencils—Peerless Pencils, M. & S. M.
" Dixon's Round, M. & S. M.
" Faber's Round, No. 3.
" English Drawing, F. & H. B.
" Eagle Round, No. 2½.
" American Round, No. 2 and 3.

Slates.

Webster's Primary Dictionary.
" Common School Dictionary.

TEXT BOOKS USED IN VARIOUS COURSES.

ALGEBRA.—Course 1 to 4.—Olney's Complete Schoo Algebra.

ARITHMETIC.—Fish's Robinson's Arithmetic.

BOOK-KEEPING, Course 2 to 4.—Wooley's Book-keeping and Blanks.

CHEMISTRY. — William's Introduction to Chemical Science.

COMMERCIAL LAW.—Clark's Commercial Law.

ENGLISH:

Course 1. Welsh's English Composition.

Courses 2, 2*a*, 3 and 5. Whitney's Essentials of English Grammar.

Course 4. Kellogg's Rhetoric.

ENGLISH LITERATURE:

Course 1. Brooke's Primer of English Literature.
Hudson's School Edition of Shakespeare's Julius Cæser, Ginn & Co.
Bacon's Essay's, Alden.
Milton's L'Allegro and Il Penseroso, Hunt & Eaton.
The Cavalier Poets, Effiingham, Maynard & Co.
Dryden's St. Cecilia's Day, Effingham, Maynard & Co.
Pope's Essay on Criticism, Effingham, Maynard & Co.

Course 2. Addison's Essays and Tales, Cassell.
Johnson's Rasselas, Alden.
Cowper's Task, Book 1, Effingham, Maynard & Co.
Mrs. Browning's Poems, Effingham, Maynard & Co.
Ruskin's Modern Painters, Effinghan, Maynard & Co.
Selected Poems from Cowper, Grey, Hood, Shelley and Keats, in Elzevir Library Edition, Alden.
Carlyle's Hero as Man of Letters, Alden.
Wordsworth's Poems, by Matthew Arnold, Franklin Square Library, Harper Bros.

Course 3. Paradise Lost, Books I and II, with Sprague's Notes, Ginn & Co.
Macaulay's Essay on Milton, Alden.
Emerson's Essay on Nature, Alden.
Ruskin's Sesame and Lillies, Alden.
Shakespeare's As You Like It, Aldne.
Dr. Brown's Thackeray's Literary Career, Alden.
Selected Poems from Tennyson, Alden.
Selected Poems from Matthew Arnold, Alden.
Lowell's Address on Libraries, &c., Houghton Mifflin & Co.
Lowell's Vision of Sir Launfal, &c., Houghton, Mifflin & Co.
Lincoln's Address at Gettysburg, &c., Houghton, Mifflin & Co.

FRENCH:

Course 1. Chardenal's First French Course.

Course 2. Chardenal's Second French Course.
La France par Rougemont.

Course 3. Chardenal's Exercises for Advanced Pupils.
Les Fables de La Fontaine.

Course 4. Chardenel's Exercises for Advanced Pupils.

GEOMETRY, Courses 1 to 4.—Olney's New Elementary Geometry.

GERMAN:

Course 1. Ahn's Henn's German Method (all courses).
First Semester, Leander's Traumereien, D. C. Heath & Co.
Grimm's Maerchen.
Second Semester, Buchheim's German Poetry for Beginners, Macmillan.

Course 2. First Semester, Wilhelmine v. Hillern, Hoher als die Kirche, H. Holt & Co.
Der Zwerg Nase, D. C. Heath & Co.
Second Semester, Macmillan's Progressive German Reader, 1.

Course 3. First Semester, Goethe's Hermann und Dorothea, H. Holt & Co.
Second Semester, Bernhardt's Novelettes, Vol. 1, D. C. Heath & Co.

Course 4. First Semester, Schiller's Ballads, D. C. Heath & Co.
Second Semester, Goethe's Egmont, H. Holt & Co.

GREEK:

Course 1. White's First Greek Book.
Goodwin's Greek Grammar (all courses).

Course 2. Goodwin and White's First Four Books of Xenophon's Anabasis, with vocabulary.
Jones' Greek Prose Composition.

Course 3. Same as Course 2.

Course 4. Keep's Homer's Illiad.

HISTORY:

Course 1. Fyffe's History of Greece (Primer).
Creighton's History of Rome (Primer).

Course 2. Freeman's General Sketch.

Course 3. Montgomery's History of England.

Course 4. Johnston's History of the United States.

Course 5. Johnston's " "

LATIN:

Course 1. Allen and Greenough's Latin Grammar.
Collar and Daniell's The Beginners' Latin Book.

Course 2. Same as Course 1, and Collar's Practical Latin Composition.

Course 3. Allen and Greenough's Latin Grammar.
Collar's Practical Latin Composition.
Kelsey's Cæser.
Ginn & Co., Classical Atlas.

Course 4. Same as Course 3.

Course 5. Allen and Greenough's Latin Grammar.
Collar's Practical Latin Composition.
Allen and Greenough's Cicero, revised edition, with vocabulary.

Course 6. Same as Course 5, and Allen and Greenough's Ovid.

Course 7. Allen and Greenough's Latin Grammar.
Freize's Vergil.

Course 8. Same as Course 7.

READING:

Course 1. Thanatopsis and other favorite Poems of Bryant.
Little Daffydowndilly, etc., Riv. Lit. Ser., No. 29.
Wonder Book, Part I, Riv. Lit. Ser., No. 17.

Evangeline, Riv. Lit. Ser., No. 1.
The Children's Hour, etc., Riv. Lit. Ser., No. 11.
Whittier Leaflets, Riv. Lit. Ser., Extra No. G.

Course 2. Washington and his Country, Irving and Fiske.

Course 3. Goldsmith's Select Poems, Ed. by Rolfe.
Sir Roger de Coverly papers, Effingham, Maynard & Co.
Lamb's Tales from Shakespeare, Routledge.
Macaulay's Lays of Ancient Rome, Rolfe.
Scott's Tales of Chivalry, Rolfe, Ginn & Co.

Course 3*a*. Chaucer's Stories Simply Told, Mary Seymour
Lambs' Tails from Shakespeare, Routledge.
Quentin Durwark, abr. by Charlotte Yonge.
Macaulay's Lays of Ancient Rome, Rolfe.

TRIGONOMETRY, Course 1.—Olney's Elements of Trigonometry.

ZOOLOGY, Course 1.—Packard's Zoology, Briefer Course.

REPORT OF THE SECRETARY.

REPORT OF THE SECRETARY.

To the Board of Education:

GENTLEMEN:—I have the honor to submit herewith, as required by rule, my report of the financial transactions of the Board for the fiscal year ending June 30th, 1890:

BUILDING FUND.

Receipts.

From taxes, 1889	$ 129,785 40	
" " 1888	28 12	
" city bids	485 13	
" interest on daily balances	1,899 79	
" sale of buildings	553 00	
" " " Field Avenue lots	3,000 00	
		$135,751 44

Disbursements.

Paid for real estate	$ 14,312 20	
" buildings	100,729 47	
" insurance	396 40	
" overdraft	4,979 84	
" interest on overdraft	18 89	
" loan from Book of Reference Fund	1,200 00	
		121,636 80
Balance June 30, 1890		$14,114 64

REPAIR FUND.

Balance July 1st, 1889	$ 7,812 39

Receipts.

From taxes, 1889	$ 26,659 85	
" " 1888	14 60	
" city bids	292 31	
" primary school fund	7,048 44	
" interest on daily balances	364 86	
" insurance	75 00	
		$ 34,455 06
Total		$ 42,267 45

Disbursements.

Paid for materials	$ 16,469 82	
" labor	21,032 23	
" error, Warrant No. 302	5 00	
		37,507 05
Balance June 30th, 1890		$ 4,760 40

SALARY FUND.

Balance July 1st, 1889		$ 13,063 22

Receipts.

From taxes, 1889	$ 252,691 39	
" " 1888	125 71	
" city bids	2,514 30	
" primary school fund	66,757 80	
" interest on daily balances	4,763 37	
" return of Prof. Dodge's salary covered back	90 00	
		326,942 57
Total		$ 340,005 79

Disbursements.

Paid for officers salaries	$ 9,096 83	
" " teachers "	303,331 87	
" " janitors "	26,860 50	
		339,289 20
Balance June 30th, 1890		$ 716 59

GENERAL FUND.

Balance July 1st, 1889		$ 11,886 26
Receipts.		
From taxes, 1889	$ 36,602 22	
" " 1888	24 76	
" city bids	572 50	
" primary school fund	9,676 48	
" interest on daily balances	1,067 74	
" sale of old iron	58 00	
" sale of old seats	1 00	
" sale of old sash	2 00	
" fines	4 40	
" rebate on oil	2 25	
		48,011 35
Total		$ 59,897 61
Disbursements.		
Paid for supplies	$ 5,515 45	
" fuel	11,954 66	
" furniture	6,949 70	
" printing and stationery	4,973 50	
" rent	380 00	
" census	1,849 60	
" miscellaneous	5,652 05	
		37,274 96
Balance June 30th, 1890		$ 22,622 65

BOOK OF REFERENCE AND APPARATUS FUND.

Balance July 1st, 1889		$ 218 82
Receipts.		
From tuition fees	$1,246 92	
" loan to Building Fund	1,200 00	
" interest on daily balances	9 14	
" use of laboratory	20 00	
		2,476 06
Total		$ 2,694 88

Disbursements.

Paid for supplies	$ 752 16	
" printing and stationery	1,554 46	
" apparatus	112 35	
" rebate on tuition	3 00	
		$ 2,421 97
Balance June 30th, 1890		$ 272 91

SECRETARY'S CONTINGENT FUND.

Balance July 1st, 1889	$ 200 00
Balance June 30th, 1890	$ 200 00

The following is a statement in detail of warrants drawn in the fiscal year ending June 30, 1890:

BUILDING FUND.

Real Estate.

1889.	Voucher.		Amount.	
July	1391	A. W. Freer, livery	$ 7 00	
	1395	Robert Hosie, Agent Tillman avenue lots	2,200 00	$ 2,700 00
Sept.	1435	George H. Hammond, 29th street lots	700 00	700 00
Nov.	1483	John Pridgeon, lot 24, Twelfth street	$ 1,500 00	
	1484	William Houghton, lots 25 and 26 Twelfth street	1,800 00	3,300 00
1890.				
Jan.	1520	C. M. Burton, abstracts	$ 81 20	
	1521	Jas. O. Van Auden, payment on lot, Adelaide street	100 00	
	1522	Wm. J. Gray, trustee, payment on lot, Adelaide street	100 00	
	1524	Jno. N. Jantz, payment on lot, Adeliade street	100 00	381 20
Feb.	1547	Jno. N. Jantz, balance on house and lot, Adelaide street	1,800 00	

Feb.	1548	Jas. O. Van Auden, house and lot, Adelaide street.....	$ 3,000 00	
	1549	Wm. J. Gray, trustee, balance on lots, Adeliade street.....	2,900 00	
	1595	McLaughlin & Campau, surveying,.....	8 00	$7,708 00
Mar.	1607	Thomas Campau, surveying....	8 00	8 00
Apr.	1621	Thomas Compau, surveying....	8 00	8 00
				$14,312 20

BUILDING FUND.

New Buildings.

1883.

July	1392	S. A. Young & Co., 1st estimate, Trowbridge.....$	488 75	
	1393	E. A. Candler, 3rd estimate, Trowbridge.....	297 50	
	1394	P. J. Hayes, inspecting.....	87 50	
	1398	W. H. Hollands & Sons, 1st estimate, Miami Avenue.....	2,451 83	
	1399	S. F. Young & Co., 2d estimate, Trowbridge...	130 90	
	1400	Harcus & Lange, 2d estimate, Trowbridge.....	748 00	
	1401	E. A. Candler, 4th estimate, Trowbride.....	1,177 29	
	1402	J. B. Tarleton, architect.....	97 60	
	1403	Workmen's pay-roll, new building4.....	76 50	$5,555 87
Aug.	1404	Workmen's pay-roll, new buildings.....	42 72	
	1405	Harcus & Lange, 3rd estimate, Trowbridge.....	1,184 05	
	1406	W. H. Hollands & Sons, 2d estimate, Miami avenue.....	1,593 75	
	1407	Detroit Wire and Iron Co., 1st estimate, Miami avenue.....	148 80	
	1408	William Frier, livery.....	8 00	
	1409	John B. Morris, 1st estimate, Miami...	999 17	

Aug.	1410	J. B. Tarleton, architect.....	$ 46 40	
	1411	Workmen's pay-roll, new buildings.....	40 95	
	1412	Workmen's pay roll, new buildings.....	21 00	
	1413	W H. Anderson & Son, blacksmithing.....	23 42	
	1414	E. A. Candler, 5th estimate, Trowbridge.....	216 27	
	1416	I. D. Smead & Co., 1st estimate, Miami.....	1,897 20	
	1417	I. D. Smead & Co., 1st estimate, Trowbridge.....	2,775 25	
	1418	Detroit Cornice & Slate Co., 1st estimate, Trowbridge.....	688 93	
	1419	Detroit Cornice & Slate Co., 1st estimate, Miami.....	397 04	
	1420	Max Bartholomai, 1st estimate, Tillman.....	1,385 35	
	1421	W. H. Hollands & Sons, 3rd estimate, Miami.....	1,029 50	
	1422	W. S. Piggins, 1st estimate, Miami.....	844 90	
	1423	Workmen's pay-roll, new buildings.....	42 00	$13,384 70
Sept.	1424	Workmen's pay-roll, September	42 00	
	1425	J. B. Morris, 2d estimate, Miami	779 45	
	1426	W. H. Hollands & Sons, 4th estimate, Miami.....	606 72	
	1427	M. Bartholomai, 2d estimate, Tillman.....	1,530 00	
	1428	James C. Cobb, 1st estimate, Tillman.....	410 55	
	1429	Harcus & Lange, 4th estimate, Trowbridge.....	829 43	
	1430	Jerome & Daley, surveying....	22 00	
	1431	H. P. O'Connell & Co., 1st estimate, Tillman.....	518 13	
	1432	Edwin A. Candler, 1st estimate, McKinstry.....	350 00	
	1433	Workmen's pay-roll, inspectors	42 00	

Sept.	1434	J. B. Tarleton, architect.....	$ 89 60	
	1436	Workmen's pay-roll, inspectors	42 00	
	1437	E. A. Candler, 6th estimate, Trowbridge.....	178 65	
	1438	Detroit Cornice & Slate Co., 2d estimate, Miami.....	534 56	
	1439	Detroit Cornice & Slate Co., 2d estimate, Trowbridge.....	325 63	
	1440	S. F. Young & Co., 3d estimate, Trowbridge.....	221 85	
	1441	J. B. Morris, 1st estimate, McKinstry.....	607 75	
	1442	M. Bartholomai, 3d estimate, Tillman.....	553 75	
	1443	Micaael Finn, 1st estimate, Trowbridge.....	1,474 75	
	1444	James C. Cobb, 1st estimate, McKinstry.....	91 80	
	1445	James C. Cobb, 2d estimate, Tillman.....	155 45	
	1446	Workmen's pay-roll, inspectors	42 00	
	1447	E. A. Candler, 2d estimate, McKinstry.....	306 00	$ 9,754 07
Oct.	1448	Workmen's pay-roll, inspectors	42 00	
	1449	Jno. R. Morris, 2d estimate, McKinstry.....	505 75	
	1450	Harcus & Lange, 5th estimate, Trowbridge.....	1,134 97	
	1451	Detroit Wire & Iron Works, 2d estimate, Miami.....	65 23	
	1452	McDonald Bros. & Co., 1st estimate, Miami.....	157 25	
	1453	Detroit Wire & Iron Co., 1st estimate, McKinstry	25 84	
	1454	H. P. O'Connell & Co., 2d estimate, Tillman.....	978 41	
	1455	J. B. Tarleton, architect.....	35 60	
	1456	Workmen's pay-roll, inspector.	42 00	
	1457	M. Bartholomai, 4th estimate, Tillman.....	619 90	
	1458	Workmen's pay-roll, inspector.	42 00	

Oct.	1459	E. A. Candler, 3d estimate, McKinstry	$ 507 75		
	1460	E. A. Candler, 7th estimate, Trowbridge	323 25		
	1461	J. B. Morris, 3rd estimate, McKinstry	518 50		
	1462	I. D. Smead & Co., 1st estimate, Tillman	1,423 75		
	1463	Spindler & Son, 1st estimate, Trowbridge	500 00		
	1464	Workmen's pay-roll, new buildings	42 00	$ 6,964	20
Nov.	1465	Workmen's pay-roll, new buildings	117 50		
	1466	Workmen's pay-roll, new buildings	125 88		
	1467	Workmen's pay-roll, new buildings	106 31		
	1469	Hutton Bros. & Co., 1st estimate, Tillman	525 30		
	1470	J. C. Cobb, 3d estimate, Tillman.	171 60		
	1471	Jas. Cornell, 1st estimate, Miami	323 00		
	1472	H. P. O'Connell & Co., 3d estimate, Tillman	403 73		
	1473	M. C. Martin & Co., 1st estimate, Tillman	195 50		
	1474	Harcus & Lange, 6th estimate, Trowbridge	1,008 95		
	1475	Daniel Lane, 1st estimate, Ferry	575 60		
	1476	Jno. B. Morris, 4th estimate, McKinstry	529 55		
	1477	George Hanley, 1st estimate, Miami	1,004 70		
	1478	Detroit Cornice and Slate Co., extra on Trowbridge	2 75		
	1479	J. E. Bolles & Co., 1st estimate, Trowbridge	106 25		
	1480	Detroit Cornice and Slate Co., 3rd estimate, Trowbridge	228 96		
	1482	J. B. Tarleton, architect	20 00		
	1485	Workmen's pay-roll, new buildings	160 13		

Nov.	1486	Workmen's pay-roll, new buildings	$	175 59		
	1487	Daniel Lane, 2d estimate, Ferry		1,079 25		
	1488	Dickinson & Hood, hardware		39 93		
	1489	Peter Dingemans, lumber		239 25		
	1490	W. S. Piggins, 2d estimate, Miami		307 45	$ 7,447	18
Dec.	1491	Workmen's pay-roll, new buildings		201 65		
	1492	E. A. Candler, 1st estimate, Newberry		612 43		
	1493	John Deppert, teaming		56 00		
	1494	Western Plumbing and Heating Co., 1st estimate, Trowbridge.		131 75		
	1495	John B. Morris, 3rd estimate, Miami		879 75		
	1496	H. P. O'Connell & Co., 1st estimate, Ferry		613 70		
	1497	M. Bartholomai, 5th estimate, Potter		154 25		
	1498	Harcus & Lange, 7th estimate, Trowbridge		900 80		
	1499	Michael Finn, 2nd estimate, Trowbridge		751 10		
	1500	Thomas Calnon, 1st estimate, Potter		531 33		
	1501	Detroit Wire and Iron Co., 3rd estimate, Miami, and 1st McKinstry		77 89		
	1502	J. H. Wiltsie, 1st estimate, McKinstry		170 00		
	1503	Workmen's pay-roll, placing seats		102 63		
	1505	White & Douglas, 1st estimate, Ferry		334 05		
	1506	John B. Morris, 4th estimate, Miami		493 00		
	1507	Daniel Lane, 3rd estimate, Ferry		1,080 15		
	1508	Thomas Calnon, 1st estimate, McKinstry		363 97		
	1509	Workmen's pay-roll, new buildings		70 25		

Dec.	1510	Workmen's pay-roll, new buildings	$ 44 82	$ 7,569 52
1890.				
Jan.	1511	Workmen's pay-roll	48 45	
	1512	Western Plumbing & Heating Co., 2nd estimate, Trowbridge	162 50	
	1513	Jno. R. Morris, 5th estimate, Miami	500 00	
	1514	H. P. O'Connell & Co., 2nd est. Ferry	875 25	
	1515	Peter Dingemans, lumber	23 11	
	1516	J. B. Tarleton, architect	39 20	
	1517	Detroit Cornice and Slate Co., 1st estimate, Ferry and McKinstry	277 64	
	1518	W. H. Anderson & Son, blacksmithing	34 51	
	1519	E. A. Candler, 2nd estimate, Newberry	214 00	
	1523	Workmen's pay-roll, new buildings	66 48	
	1525	H. H. Miller, 1st estimate, Ferry	88 66	
	1526	Harcus & Lange, 8th estimate, Trowbridge	589 75	
	1527	Sprindler & Son, 2nd estimate, Trowbridge	416 75	
	1528	Spindler & Son, extra on Trowbridge	8 93	
	1529	W. H. Hollands & Son, 1st estimate, Twelfth	658 75	
	1530	Thomas Calnon, 2nd estimate, McKinstry	264 03	
	1531	Thomas Calnon, 2nd estimate, Potter	593 47	
	1532	Harcus & Lange, extra on Trowbridge	73 39	
	1533	James Cornell, 2nd estimate, Miami	191 25	
	1534	W. H. Hollands & Son, 5th estimate, Miami	209 25	
	1535	H. P. O'Connell & Co., 4th estimate, Potter	766 70	

Jan.	1536	John R. Morris, 6th estimate, Miami ....$	557 45	
	1537	Workmen's pay-roll, new buildings	19 93	
	1538	James C. Cobb, 4th estimate, Potter	206 00	
	1539	James C. Cobb, 2nd estimate, McKinstry	29 80	
	1540	James C. Cobb, 1st estimate, Newberry	168 30	
	1541	I. F. Young & Co., final payment, Trowbridge....	148 50	
	1542	I. D. Smead & Co., final payment, Trowbridge....	969 00	
	1543	E. A. Candler, final payment, Trowbridge	367 75	
	1544	Workmen's pay-roll, new buildings....	163 29	
	1545	Harcus & Lange, final payment, Trowbridge	367 05	
	1546	Spindler & Son, final payment, Trowbridge	48 25	$ 9,139 39
Feb.	1550	Detroit Cornice & Slate Co., final payment, Trowbridge...	59 68	
	1551	Western Plumbing & Heating Co., final payment, Trowbridge	15 75	
	1552	J. E. Bowles & Co., final payment, Trowbridge....	53 65	
	1553	Michael Finn, final payment, Trowbridge....	117 15	
	1554	I. D. Smead & Co., iron, and final payment, Miami....	776 30	
	1555	Workmen's pay-roll, new buildings....	185 98	
	1556	Detroit Wire & Iron Works, final payment, Miami....	51 52	
	1557	Jas. Cornell, final payment, Miami....	285 75	
	1558	E. A. Candler, 2d and 3d estimates, Newberry....	897 81	

Feb.	1559	W. H. Holland's & Son., 2d estimate, Dickinson.....	$ 1,020 00
	1560	John B. Morris, extras on Miami	88 10
	1561	Jas. B. Palmer, 1st estimate, Dickinson.....	830 00
	1562	Moreton, Brundage Co., 1st estimate Dickinson.....	448 00
	1563	Michael Finn, extras, Trowbridge	52 50
	1564	A. McEnhill, 1st estimate, Newberry.....	621 78
	1565	H. P. O'Connell & Co., 5th estimate Potter.....	1,273 50
	1566	John B. Morris, 5th estimate, McKinstry.....	600 00
	1567	Workmen's pay-roll, new buildings	178 24
	1568	E. A. Candler, extras, Trowbridge	137 36
	1569	Macdonald Bros. & Co., 1st estimate, Potter.....	103 00
	1570	John B. Morris, final payment, Miami.....	538 18
	1571	Macdonald Bros. & Co., final payment, Miami.....	246 75
	1572	W. H. Hollands & Son, final payment, Miami.....	293 70
	1573	J. E. Bolles & Co., final payment, Potter	142 44
	1574	Hutton Bros. & Co., final payment, Potter.....	92 70
	1575	Macdonald Bros. & Co., final payment, Potter.....	100 00
	1576	Thomas Calnon, final payment, Potter	59 20
	1577	M. Bartholomai, final payment, Potter	218 75
	1578	I. D. Smead & Co., final payment, Potter.....	251 25
	1579	H. P. O'Connell & Co., final payment Potter.....	207 39

Feb.	1580	M. C. Martin & Co., final payment, Potter	$ 367 50	
	1581	W. S. Piggins, final payment, Miami	60 65	
	1582	George Hanley, final payment, Miami	542 30	
	1583	Workmen's pay-roll, new buildings	108 44	
	1584	I. D. Smead & Co., iron seats, Potter	323 48	
	1585	W. S. Piggins, extras, Miami	3 25	
	1586	John B. Morris, 6th estimate, McKinstry	549 20	
	1587	J. B. Tarleton, architect	120 80	
	1588	Thomas Calnon, 1st estimate, McKinstry	381 35	
	1589	John B. Morris, extras, McKinstry	30 80	
	1590	J. E. Bolles & Co., 1st estimate, Dickinson	53 18	
	1591	E. A. Candler, 4th estimate, Newberry	318 75	
	1592	White & Douglas, 2d estimate, Ferry	163 75	
	1593	James C. Cobb, 2d estimate, Newberry	227 00	
	1594	W. H. Hollands & Sons, 3rd estimate, Dickinson	1,360 00	
	1596	Workmen's pay-roll, new buildings	85 73	
	1597	M. Bartholomai, extras on Potter	26 50	
	1598	Moreton, Brundage Co., 2d estimate, Dickinson	227 80	
	1599	J. B. Palmer, 2d estimate, Dickinson	312 80	
	1600	J. H. Wiltsie, 2d estimate, McKinstry	140 50	
	1601	I. D. Smead & Co., 1st estimate, Ferry	1,042 95	16,393 16
Mar.	1602	Workmen's pay-roll	111 63	

Mar.	1603	Workmen's pay-roll.....	$ 87 36	
	1605	Thomas Campau, surveying....	8 00	
	1606	Workmen's pay-roll.....	59 58	
	1608	J. B. Tarleton, architect.....	13 20	
	1609	J. B. Morris, final payment, McKinstry.....	174 55	
	1610	Workmen's pay-roll.....	82 90	
	1611	James C. Cobb, final payment, McKinstry.....	6 30	
	1612	Detroit Wire and Iron Works, final payment, McKinstry....	2 87	
	1613	E. A. Candler, 6th estimate, Newberry	450 00	
	1614	J. H. Wiltsie, final payment, McKinstry.....	175 00	
	1615	E. A. Candler, final payment, McKinstry.....	81 25	
	1616	Detroit Cornice and Slate Co, final payment, McKinstry..	7 61	
	1617	Detroit Cornice & Slate Co., final payment Miami.....	54 80	
	1618	Thomas Calnon, final payment, McKinstry....	32 00	$ 1,346 85
Apr.	1619	Workmen's pay-roll, new buildings.....	68 61	
	1620	Thomas Calnon, 2nd estimate, Ferry.....	420 45	
	1622	Daniel Lane, 4th estimate, Ferry	115 00	
	1623	Daniel Lane, 1st estimate, Roberts....	1,020 00	
	1624	H. P. O'Connell & Co., 3rd estimate, Ferry.....	1,098 20	
	1625	American Brass and Metal Works, 1st estimate, Ferry...	69 00	
	1626	A. McEnhill, 2d and 3d estimates, Newberry.....	1,017 45	
	1627	W. H. Hollands & Sons, 4th estimate, Dickinson.....	994 50	
	1628	Workmen's pay-roll, new buildings.....	51 08	

April	1629	Workmen's pay-roll, new buildings	$ 74 39	
	1630	J. B. Palmer, 3rd estimate, Dickinson	872 10	
	1631	H. H. Miller, 2d estimate, Ferry	79 74	
	1632	Daniel Lane, 2d estimate, Roberts	1,275 00	
	1633	Workmen's pay-roll, new buildings	42 00	
	1634	E. A. Candler, 7th estimate, Newberry	304 51	$ 7,502 03
May	1635	Workmen's pay-roll	62 50	
	1636	J. B. Morris, 1st estimate, Roberts	505 75	
	1637	E. A. Candler, 8th estimate, Newberry	100 69	
	1638	J. B. Palmer, 4th estimate, Dickinson	600 00	
	1639	W. H. Anderson & Son, blacksmithing	120 41	
	1640	Workmen's pay-roll, new buildings	72 22	
	1641	I. D. Smead & Co., 1st estimate, Dickinson, final payment on Ferry, and iron seats, Potter.	2,506 62	
	1642	Detroit Cornice and Slate Co., 1st estimate, Dickinson	598 32	
	1643	J. B. Palmer, 5th estimate, Dickinson	226 32	
	1644	A. McEnhill, 4th estimate, Newberry	257 12	
	1645	I. D. Smead & Co., 1st estimate, Roberts	880 00	
	1647	Workmen's pay-roll	47 56	
	1648	Workmen's pay-roll	42 00	
	1649	Daniel Lane, 3rd estimate, Roberts	1,445 00	
	1650	Calnon & Goodall, 1st estimate, Dickinson	447 10	
	1651	Detroit Cornice & Slate Co., 1st estimate, Newberry, 2d estimate, Dickinson	199 36	

May	1652	Workmen's pay-roll, new buildings	$ 42 00	$ 8,157 97
June	1653	Workingmen's pay-roll, new buildings	58 80	
	1654	J. B. Morris, 2d estimate, Roberts	952 00	
	1655	Robertson & McDonald, 1st estimate. Roberts	1,187 00	
	1656	W. H. Hollands & Sons, 5th estimate, Dickinson	944 75	
	1657	M. C. Martin & Co., 1st estimate, Newberry, 1st estimate, Dickinson	270 98	
	1658	Morton, Brundage Co., 3rd estimate, Dickinson	250 45	
	1659	Workmen's pay-roll, new buildings	52 36	
	1660	Geo. C. Oldfield, architect	33 60	
	1661	A. W. Freer, livery	4 00	
	1662	J. E. Bolles & Co., extras, Potter	5 60	
	1663	Daniel Lane, 4th estimate, Roberts	1,112 00	
	1664	Calnon & Goodall, 2d estimate, Dickinson	532 90	
	1665	Jas. J. Craig, trees	202 50	
	1666	H. H. Miller, final payment, Ferry	139 90	
	1667	White & Douglas, final payment Ferry	26 70	
	1668	Thos. Calnon, final payment, Ferry	22 20	
	1669	Detroit Cornice & Slate Co., final payment, Ferry	12 60	
	2670	Daniel Lane, final payment, Ferry	150 00	
	1671	H. P. O'Connell & Co., final payment, Ferry	430 85	
	1672	Workmen's pay-roll, new buildings	45 80	
	1673	Geo. C. Oldfield, architect	43 20	
	1674	I. D. Smead & Co., 2d estimate, Roberts	880 00	

June	1675	Workmen's pay-roll, new buildings	$ 65 34		
	1676	Fulton Iron & Engine Works, bell, Potter	86 00	$ 7,509 53	
					$100,729 47

INSURANCE.

Aug.	1415	Jas. A. Jones, insurance	$ 120 84	$ 120 84	
Nov.	1468	Jas. A. Jones, insurance	155 00	155 00	
Mar.	2604	Jas. A. Jones, insurance	120 56	120 56	
					$396 40

BOOK OF REFERENCE AND APPARATUS FUND.

July	101	A. H. Andrews & Co., maps	$ 159 67		
	102	H. J. Milburn, jars	8 50	$ 168 19	
Oct.	104	Whitemore, Robinson & Co., moulding clay	3 25	3 25	
Nov.	105	Jno. R. King, sundry bills	150 00		
	106	Ira Mayhew, book-keeping blanks	18 00		
	107	Macauley Bros., books	51 85		
	108	Detroit News Co., books	27 14		
	109	Detroit Business University, books	28 00		
	110	Detroit News Co., books	31 50		
	111	Macauley Bros., books	939 88		
	112	Wright, Kay & Co., microscopes	70 00	1,316 37	
Dec.	113	H. V. Richards & Co., druggist's sundries	43 92		
	114	W. Suckert & Sons, book-binding	18 20		
	115	Detroit News Co., books, night schools	93 45		
	116	Macauley Bros., books, night schools	297 57	453 14	
Jan.	117	Eberbach & Co., chemicals	26 68		
	118	Detroit Library Commission, lost book	1 02	27 70	

Feb.	119	James E. Davis & Co., drugs...$	5 68		
	120	Fisher Electric Co., supplies....	19 85		
	121	T. B. Rayl & Co., supplies... ..	2 54		
	122	F. Barcroft, Wayne County maps.....	40 25	$	68 32
Mar.	123	John Macfarlane, maps.....	109 50		
	124	W. Suckert & Son, book-binding.....	12 75		122 25
Apr.	125	C. W. Dodge, skeleton.....	35 00		
	126	Eberback & Co., chemicals.....	14 68		
	127	Detroit News Co., books, night schools.....	84 00		
	128	J. E. Davis & Co., chemicals....	8 21		
	129	Electrical Machinery Co., apparatus.....	6 50		
	130	J. W. Queen & Co., supplies....	4 95		
	131	T. B. Rayl & Co., hardware....	16 80		
	132	C. A. Strelinger & Co., hardware.....	5 81		175 95
May	133	John Macfarlane, books.....	6 45		
	134	H. J. Milburn, forceps.....	7 50		13 95
June	135	Wright, Kay & Co., glasses....	12 00		
	136	American Book Co., books.....	48 87		
	137	L. Black & Co., glasses.....	3 00		
	138	Mrs. Grundy, rebate on Nelson Grundy.....	3 00		
	139	Western Calcium Light Co., charging cylinders..... ...	6 00		72 87
					$2,421 97

GENERAL FUND.

Supplies.

1889.

July	512	Mutual Gas Co., gas, June.....$	2 70	
	513	Tel. and Tel. Con. Co., telephones.....	22 50	
	514	Baker, Gray & Co., corduroy....	19 35	
	515	Detroit Gas Light Co., gas, June	37 80	
	516	John R. King, sundry bills.....	16 27	
	528	John R. King, sundry bills.....	19 65	

July	529	R. Byrne & Co., hardware.....$	15 00	
	530	Schulte Soap Co., soap..... ...	15 75	
	531	B. Reilly, car tickets.....	16 00 $	165 02
Aug.	548	John R. King, sundry bills.....	9 20	
	549	Detroit Gas Light Co., gas, July.....	13 35	
	559	Theo. H. Eaton & Son, ink materials	2 67	
	560	Hodgson & Howard, hardware.	1 75	
	561	A. Laitner brushes.....	84 50	
	562	W. S. Penfield, grass seed.....	1 20	
	563	Richmond, Backus Co., toilet paper.....	6 50	
	564	John Miller, laundering.....	3 00	
	565	John R. King, sundry bills.....	1 38	123 55
Sept.	584	A. Laitner, brushes.....	53 25	
	585	Theo. H. Eaton & Son, ink materials.....	2 63	
	586	Daniel Anglim, repairing clocks	5 65	
	587	Bentley Oil Co., oil.....	1 42	
	590	Detroit Gas Light Co., gas, August.....	34 80	
	591	Detroit City Railway Co., car tickets.....	20 00	
	592	Edson, Moore & Co., cotton cloth.....	28 26	
	593	Fort Wayne & Elmwood Railway Co., car tickets.....	7 50	
	594	Grand River Avenue Railway Co., car tickets.....	10 00	
	595	B. Reilly, car tickets.....	12 25	
	596	Mineralized Rubber Co., hose..	129 75	
	599	Jonn R. King, sundry bills.....	13 95	
	617	Bentley Oil Co., oil.....	9 85	
	618	A. M. Parker, sal soda..... .. .	4 00	
	619	Boydell Bros., paint.....	1 00	
	620	R. Byrne & Co., mops	10 00	
	621	Detroit City Railway Co., car tickets.....	10 00	
	622	John R. King, sundry bills.....	3 05	
	623	Fort Wayne & Elmwood Railway Co., car tickets.....	10 00	367 36

Oct.	642	Bentley Oil Co., oil.....$	3 70		
	643	Baker, Grey & Co , corduroy...	24 38		
	645	Detroit City Railway Co., car tickets.....	20 00		
	647	Detroit Gas Light Co., gas, September.....	35 25		
	648	Theo. H. Eaton & Co., ink materials.....	15 02		
	649	Mutual Gas Co., gas, September	5 55		
	650	Grand River Railway Co., car tickets.....	5 00		
	651	A. Laitner, brushes.....	51 50		
	652	F. J. Martz & Co., mop sticks...	2 00		
	653	R. L. Polk & Co., directory....	10 00		
	654	Schulte Soap Co., soap.....	28 80		
	655	Tel. and Tel. Con. Co., telephone	22 50		
	656	Taylor, Wolfenden & Co., towels.....	3 00		
	657	John R. King, sundry bills.....	23 20		
	687	Bentley oil Co., oil.	21 25		
	690	Detroit Willow Works, rattans.	2 50		
	691	Detroit City Railway Co , car tickets.....	10 00		
	692	Dickinson & Hood, hardware...	391 39		
	693	Hodgson & Howard, hardware.	1 49		
	694	A. Laitner, brushes....	42 00		
	695	S. A. Munger & Co., hardware.	4 56		
	697	Zabriska & Bennett, rubber stamps.....	4 00		
	698	H. C. Weber & Co , hardware...	2 20		
	699	John R. King, sundry bills.....	11 80	$	741 09
Nov.	722	Black Hardware Co., hardware.	2 85		
	723	R. Byrne & Co., tin work.....	10 25		
	724	Water Commission, water tax..	823 00		
	725	Detroit City Railway Co., car tickets.....	7 00		
	726	Detroit News Co., books, poor children.....	28 09		
	728	Theo. H. Eaton & Son, ink materials.....	15 00		
	729	Edson, Noore & Co., dust cloth.	6 38		

Nov.	730	Grand River Railway Co., car tickets.....$	2 00	
	731	Home of Industry, brooms.....	25 48	
	732	Mutual Gas Co., gas, October..	5 55	
	749	John Miller, laundering.....	3 00	
	750	Detroit Gas Light Co., gas, October.....	67 75	
	751	Detroit News Co., books, poor children.....	244 52	
	752	A. Laitner, brushes.....	9 50	
	753	John R. King, sundry bills.....	12 33	
	754	Bentley Oil Co., kerosene oil...	31 50	
	755	Detroit Business University, book-keeping blanks..... ...	4 50	
	756	Dickinson & Hood, hardware...	36 00	$ 1,334 70
Dec.	769	Bentley Oil Co., kerosene oil...	26 15	
	770	Detroit Gas Light Co., gas, November.....	88 88	
	772	Detroit City Railway Co., car tickets.....	5 00	
	773	Theo. H. Eaton & Son, ink material.....	3 42	
	774	Mutual Gas Co., gas, November	7 66	
	755	Thomas Jackson, ice.....	10 00	
	776	Jno. R. King, sundry bills.....	24 35	
	777	Wolverine Paper Co., paper....	10 00	175 46
Jan.	803	Bentley Oil Co , kerosene oil...	17 50	
	805	Cray, Rood & Co., corduroy....	22 80	
	806	R. Byrne & Co., mop swabs....	15 00	
	807	W. R. Cole, slate rulers	12 00	
	808	Detroit Gas Light Co., gas, December.....	85 62	
	809	Detroit Paper Co., paper bags..	2 25	
	810	Mutual Gas Co., gas, December	6 00	
	811	Dickinson & Hood, hardware...	67 15	
	813	Theo. H. Eaton & Son, copperas	9 53	
	816	Jenness & McCurdy, lamp wicks	8 34	
	817	A. Laitner, brushes.....	49 50	
	819	Tel. and Tel. Con. Co., telephones.....	22 50	
	820	H. C. Weber & Co., hardware..	2 20	
	821	John R. King, sundry bills.....	16 60	

Jan.	822	H. Merdian, charcoal.....	$ 1 50		
	832	John R. King, sundry bills... .	8 07		
	833	A. Laitner, brushes.....	63 00		
	835	Edson, Moore & Co., dust cloth.	18 63		
	837	Dean, Godfrey & Co., pulleys..	1 25		
	839	Calvert Litho. and Engrav. Co., map.....	12 00		
	840	Chas. A. McLees, kerosene oil.	16 06	$ 457	50
Feb.	853	R. Byrne & Co., mop swabs and handles.....	11 12		
	854	Bentley Oil Co., kerosene oil...	16 60		
	855	Detroit Gas Light Co., gas, February.....	77 37		
	856	Detroit News Co., books, poor children.....	330 42		
	857	Theo. H. Eaton & Son, sal soda	3 08		
	859	Home of Industry, brooms.....	21 50		
	861	Jenness & McCurdy, lamp chimneys.....	1 88		
	862	Mutual Gas Co., gas, February.	8 10		
	863	S. A. Munger & Co., hardware.	9 81		
	864	Macauly Bros., books for night schools.....	8 80		
	865	C. A. McLees, kerosene oil.....	17 64		
	866	A. M. Parker, matches.....	4 00		
	868	H. C. Weber & Co., hardware..	2 40		
	869	Jno. R. King, sundry bills.....	14 30		
	875	Gebhard Paper Co., straw board	4 80		
	882	Wolverine Paper Co., paper....	5 00		
	883	K. H. Jacobs, music.....	5 00		
	892	Macauly Bros., books for night schools.....	42 72		
	893	D. M. Ferry Seed Co., seeds....	1 08		
		Detroit News Co., books for poor children.....	151 11		
	896	Jno. R. King, sundry bills.....	14 64		
	907	John Miller, washing towels...	3 00	754	37
Mar.	913	Detroit Gas Light Co., gas, February.....	86 26		
	914	S. Taplin, flowers.....	25 00		
	915	Fisher Electric Co., wire.....	3 65		

Mar.	916	Cray, Rood & Co, corduroy....$	24 70		
	917	Mutual Gas Co., gas, February.	6 30		
	918	Bently Oil Co., oil.....	23 65		
	919	C. A. McLees, oil.....	3 02		
	921	L. Black & Co., glasses.....	3 50		
	923	Zabriska & Bennett, rubber stamp.....	1 65		
	924	Williams, Sheley & Brooks, soap.....	1 15		
	925	Detroit Soap Co., soap.....	21 90		
	926	Keenan & Jahn, glass.....	2 75		
	927	Detroit News Co., books for poor children.....	190 59		
	928	John R. King, sundry bills.....	17 85		
	908	Detroit Odor Purifier Co., Alexiteria.....	68 40		
	938	C. A. McLees, oil.....	14 48		
	940	Conrad Fey, oil.....	5 00		
	941	A. Laitner, brushes.....	21 00		
	942	T. H. Eaton & Son, ink material	18 29		
	943	Taylor, Woolfenden & Co, towels.....	5 40		
	945	H. L. Dorman, mop wringers..	7 50		
	948	F. M. Lyon, supplies.....	6 22		
	949	H. B. Mulliken, supplies.....	2 07		
	950	Electrical Con. Co., fittings	13 63		
	951	Edison Illuminating Co., electricity.....	2 00		
	953	Dickinson & Hood, hardware..	5 60		
	954	D. & M. R. R., freight.....	2 87	$	593 43
Apr.	964	Hodgson & Howard, hardware..	7 00		
	967	Tel. and Tel. Con. Co., telephones.....	22 50		
	968	M. H. Chamberlain & Co., barrel.....	1 50		
	969	Jas. E. Davis & Co., chamois skins.....	1 75		
	970	A. Laitner, brushes.....	96 47		
	971	Mutual Gas Co., gas, March....	6 90		
	972	Jno. R. King, sundry bills.....	12 11		
	973	Detroit Gas Light Co., gas, March.....	62 50		

Apr.	983	Detroit News Co., books, poor children	$ 169 44		
	984	Bentley Oil Co., oil	13 75		
	985	Jno. R. King, sundry bills	9 03		
	994	Detroit Odor Purifier Co., alexiteria	21 60	$ 424	55
May	998	Jno. R. King, sundry bills	14 75		
	999	Williams, Sheley & Brooks, soap	1 50		
	1001	Mutual Gas Co., gas, April	5 40		
	1002	Detroit Gas Light Co., gas, April	28 80		
	1011	James E. Davis & Co., sponges	7 25		
	1013	Shulte Soap Co., soap	15 85		
	1014	Allan Shelden & Co., cotton cloth	20 57		
	1015	T. H. Eaton & Son, ink material	3 45		
	1016	John Miller, washing towels	3 00		
	1017	A. Laitner, brushes	21 75		
	1018	H. H. Scuffeldt & Co., alcohol	18 70		
	1026	Michigan Germicide Co., germicide	72 00		
	1028	Detroit Odor Purifier Co., alexiteria	20 70	233	72
June	1030	Taylor, Woolfenden & Co., towels	11 72		
	1032	H. C. Weber & Co., hardware	3 70		
	1033	W. J. Penfield & Son, lawn mowers	8 98		
	1034	Mutual Gas Co., gas, May	8 55		
	1035	Hodgson & Howard, hardware	1 75		
	1036	Detroit Gas Light Co., gas, May	18 90		
	1037	Detroit Soap Co., soap	21 90		
	1040	R. Byrne & Co., hardware	11 75		
	1041	John R. King, sundry bills	13 91		
	1042	J. E. Davis & Co., acids	1 75		
	1043	S. A. Munger & Co., hardware	8 50		
	1056	Rathbone, Sard & Co, stove repairs	3 29		
	1057	A. Laitner, brushes	30 00	144	70
				$ 5,515	45

Fuel.

July.	524	Pittmans & Dean, hard and soft coal	$ 649 40		
	532	Pittmans & Dean, hard and soft coal	2,714 35		
	533	F. W. Richardson, weighing coal	75 70	$ 3,439	45
Aug.	551	Pittmans & Dean, hard and soft coal	1,754 31		
	552	Workmen's pay-roll, storing	69 20		
	553	T. W. Richardson, weighing coal	51 05		
	558	Workmen's pay-roll, storing	2 25		
	573	T. W. Richardson, weighing coal	48 90		
	574	Workmen's pay-roll, storing	19 05		
	557	Pittmans & Dean, hard and soft coal	1,538 65		
	581	Workmen's pay-roll, storing	14 00	3,497	41
Sept.	610	Pittmans & Dean, hard and soft coal	1,960 72		
	611	F. Besancon, wood	975 90		
	612	T. W. Richardson, weighing coal	56 40		
	615	Workmen's pay-roll, storing	19 25	3,012	27
Oct.	665	Pittmans & Dean, coal	20 83		
	686	Workmen's pay-roll, storing	8 75		
	704	Workmen's pay-roll, storing	75		
	705	J. & T. Hurley, kindling	302 52	332	85
Nov.	718	Workmen's pay-roll, storing	3 25		
	720	Workmen's pay-roll, storing	16 88		
	733	Workmen's pay-roll, storing	2 75		
	734	F. Besancon, wood	108 90		
	735	Pittmans & Dean, coal	522 02		
	748	Workmen's pay-roll, storing	3 25		
	757	T. W. Richardson, weighing coal	13 25	670	30
Dec.	781	W. B. Miller, sawing wood	76 01		
	783	F. Besancon, wood	56 93		
	784	Pittmans & Dean, coal	59 40		
	793	W. B. Miller, sawing wood	10 34	202	68

1890.					
Jan'y	844	Pittmans & Dean, soft coal....$	432 36		
	845	W. B. Miller, sawing wood.....	3 43		
	846	H. Johnston, sawing wood.....	2 25		
	847	F. Besancon, wood.....	44 56	$	482 60
Feb'y	884	T. W. Richardson, weighing coal.....	18 50		18 50
Mar.	930	Pittmans & Dean, coal.....	193 14		
	931	T. W. Richardson, weighing coal.....	6 45		199 59
April	980	Pittmans & Dean, coal.....	28 34		
	986	F. Besancon, wood..... ...	9 00		
	987	J. & T. Hurley, kindling.....	9 92		
	990	J. & T. Hurley, kindling	7 55		54 81
May	1007	Pittmans & Dean, coal.....	44 20		44 20
				$	11,954 66

Furniture.

July	534	J. H. Black & Co., carpet.....$	14 67	$	14 67
Aug.	554	Workmen's pay-roll, re-seating.	76 79		
	557	" " "	48 53		
	572	" " "	55 50		
	582	" " "	49 50		230 32
Sept.	583	Workmen's pay-roll, re-seating..	49 28		
	588	J. H. Black & Co., carpet, Tappan.....	5 50		
	597	Peters Bros., cleaning and laying carpets.....	22 28		
	609	Workmen's pay-roll, book cases	43 30		
	614	Workmen's pay-roll, book cases	8 75		
	626	Workmen's pay-roll, book cases	15 56		144 67
Oct.	641	Workmen's pay-roll, re-seating.	22 50		
	644	Clough & Warren Organ Co., tuning piano.....	2 00		
	645	Detroit News Co., clocks.....	153 00		
	663	Globe Furniture Co., seats.....	607 76		
	688	Clough & Warren Organ Co., tuning piano.....	2 00		787 26
Nov.	719	Workmen's pay-roll, re-seating.	3 75		
	721	" " "	18 77		

Nov.	736	Workmen's pay-roll, re-seating.	$ 36 44		
	737	Globe Furniture Co., writing arms	52 50		
	738	Keenan & Jahn, desks	76 00		
	739	Ideal Window Shade Co., shade repairing	129 49		
	747	Workmen's pay-roll, re-seating.	24 58		
	759	" " umbrella stands	40 29	$	381 82
Dec.	768	Workmen's pay-roll, re-seating.	24 55		
	779	" " "	31 63		
	780	Globe Furniture Co., seats	1,387 89		
	782	Ideal Window Shade Co., repairing shades	6 44		
	789	H. M. Park, ventilators	6 00		
	794	Workmen's pay-roll, re-seating.	51 62		
	795	Ideal Window Shade Co., repairing shades	63 80		
	800	Workmen's pay-roll, re-seating.	32 68		1,604 61
1890.					
Jan.	801	Workmen's pay-roll, re-seating.	54 83		
	802	Workmen's pay-roll, re-seating.	8 71		
	814	H. D. Edwards & Co., matting	117 37		
	815	Peter Grim, tuning piano	2 00		
	824	Globe Furniture Co., ink wells.	24 07		
	825	Moreton Trucking Co., trucking	8 00		
	831	Workmen's pay-roll, re-seating.	21 52		
	841	Ideal Window Shade Co., repairing shades	7 84		
	842	Fulton Iron and Engine Works, bell	157 20		
	843	Workmen's pay-roll, re-seating.	22 93		
	851	" " "	33 94		458 41
Feb.	852	Workmen's pay-roll, re-seating.	42 03		
	858	H. D. Edwards & Co., matting.	59 61		
	860	Hudson & Symington, carpet	72 93		
	867	F. J. Schwankovsky, tuning piano	2 00		
	885	Freund Bros., curtains	139 51		
	891	Workmen's pay-roll, seating	36 00		
	902	Freund Bros., curtains	13 51		
	903	Keenan & Jahn, desks	114 00		
	909	H. M. Park, ventilators	7 20		486 79

Mar.	920	Joseph Parks, pointers.....	$ 25 00		
	922	H. D. Edwards & Co., matting..	38 92		
	929	Globe Furniture Co., seats.....	1,859 41		
	944	Peter Grim, tuning piano.....	4 00		
	952	H. D. Edwards & Co., matting..	19 60	$ 1,946	93
April	966	Daniel Anglim, repairing clocks	1 50		
	978	Freund Bros., curtains.....	59 09		
	979	Ideal Window Shade Co., shades	1 40		
	991	Cleveland School Furniture Co., desks.....	202 45		
	996	M. M. Rose, piano.....	75 00	339	44
May	1000	J. H. Black & Co., carpet.....	7 23		
	1009	H. M. Clark, ventilators.....	20 00		
	1012	N. Bloom & Co., flags.....	41 00		
	1022	Keenan & Jahn, desks.....	102 00	170	23
June	1031	H. R. Williams, piano cover...	4 00		
	1038	J. H. Black & Co., carpet.....	5 75		
	1039	Dean, Godfrey & Co., curtain cord.....	4 82		
	1052	Globe Furniture Co., seats.....	369 98	384	55
			$ 6,949	70	

Printing and Stationery.

July	517	Daily Abend Post, advertising.	$ 4 00		
	518	C. M. Rousseau, printing.....	40 96		
	519	Richmond, Backus Co., stationery.....	1 35		
	520	Detroit Evening Journal, advertising.....	3 85		
	521	Evening News, advertising.....	7 84		
	522	Gulley, Bornman & Co., printing.....	36 80		
	523	Tribune Printing Co., advertising.....	10 00		
	524	Detroit News Co., stationery...	355 13	459	93
Aug.	539	Detroit Free Press, advertising.	10 50		
	540	Daily Abend Post, advertising.	6 80		
	541	Detroit Journal Co., advertising	9 45		
	542	Detroit Evening News, advertising.....	26 46		

Aug.	543	Lozee, O'Brien & Co., printing.	$ 2 00	
	544	Michigan Arbeiter Zeitung, advertising	2 80	
	545	C. M. Rousseau, printing	53 00	
	546	Tribune Printing Co., advertising	20 00	
	547	Calvert Litho. and Engraving Co., lithographing	5 00	
	566	Detroit News Co., stationery	1,005 80	
	567	Detroit Evening News, advertising	44 10	
	568	Detroit Evening Journal, advertising	14 99	
	469	Jenkins Printing Co., printing	45 00	
	570	Lozee, O'Brien & Co, printing.	5 85	
	571	Winn & Hammond, printing	30 25	1,282 00
Sept.	589	Detroit News Co., stationery	57 08	
	598	Richmond, Backus Co., stationery	31 63	
	601	Daily Abend Post, advertising.	9 00	
	602	Detroit Evening Journal, advertising	2 52	
	603	Detroit Evening News, advertising	11 76	
	604	Herold Company, advertising	6 00	
	605	Lozee, O'Brien & Co., printing.	56 84	
	606	C. M. Rousseau, printing	33 25	
	616	Detroit News Co., stationery	28 12	
	624	Lozee, O'Brien & Co., printing.	8 75	
	625	James Markey, printing	20 00	264 95
Oct.	658	Detroit Evening Journal, advertising	1 28	
	659	Detroit Evening News, advertising	166 87	
	660	Michigan Volksblatt, advertising	12 30	
	661	Richmond, Backus Co., stationery	2 85	
	662	Tribune Printing Co., advertising	29 66	
	689	Detroit News Co., stationery	9 75	

Oct.	696	Richmond, Backus Co., stationery	$ 20 02		
	697	Detroit Evening News, advertising	2 95		
	698	Gulley, Bornman & Co., printing	13 00		
	702	James Markey, printing	4 75		
	703	C. M. Rousseau, printing	30 00	$	293 43
Nov.	741	Detroit Free Press, advertising.	53 92		
	742	Daily Abend Post, advertising	1 50		
	743	Lozee, O'Brien & Co., printing.	14 00		
	744	C. M. Rousseau, printing	71 25		
	745	Richmond, Backus Co., stationery	20 55		
	746	Gulley, Bornman & Co., printing	284 70		
	759	Herold Co., advertising	8 40		454 32
Dec.	770	Detroit News Co., stationery	5 00		
	778	Richmond, Backus Co., stationery	3 25		
	786	Michigan Volksblatt, advertising	1 20		
	786	C. M. Rousseau, printing	23 00		32 45
Jan.	804	Burkhardt & Walker, bill-posting	6 50		
	812	Detroit News Co., stationery	2 25		
	818	Richmond, Backus Co., stationery	20 90		
	829	Detroit Public Library, lost books	9 18		
	830	C. M. Rousseau, printing	93 00		
	834	James Markey, "	189 52		
	836	Detroit News Co., stationery	101 33		
	838	Richmond, Backus Co., stationery	12 10		
	848	C. M. Rousseau, printing	13 00		447 48
Feb.	870	Calvert Lithographing Co., diplomas	27 28		
	871	Detroit Publishing Co., printing.	104 25		
	872	Detroit Abend Post, advertising	2 00		
	873	Detroit Free Press, advertising.	10 10		

Feb.	874	Detroit Evening News, advertising	$ 9 00	
	876	Gulley, Bornman & Co., printing	46 95	
	877	James Markey, printing	4 25	
	878	Michigan Volksblatt, printing	2 40	
	879	Richmond, Backus Co., stationery	14 13	
	880	Charles M. Rousseau, printing	33 75	
	881	Tribune Printing Co., printing	2 08	
	883	Wm. F. Moore, printing	33 15	
	895	Detroit University, blanks	6 70	
	897	Richmond, Backus Co., st'ti'n'ry	26 90	
	898	Detroit Journal Co., advertising	1 60	
	899	Tribune Printing Co., advertising	23 20	
	900	Herold Company, advertising	3 00	
	901	Detroit Publishing Co., printing	2 00	
	932	Herold Company, advertising	4 00	
	933	Detroit Free Press, advertising	9 10	
	934	W. F. Moore, printing	29 68	
	935	Richmond, Backus Co., stationery	23 50	
	955	Detroit News Co., stationery	77 05	
	956	C. M. Rousseau, printing	37 25	
	957	Herold Company, advertising	8 00	
	958	Daily Abend Post, advertising	4 50	
	959	Gulley, Bornman & Co., printing	17 25	$ 352 74
April	965	Burkhardt & Walker, bill posting	6 25	
	974	Richmond, Backus Co., stationery	3 50	
	975	Munn & Co., advertising	27 00	
	876	Gulley, Bornman & Co., printing	23 50	
	975	Detroit News Co., stationery	3 45	
	988	Richmond, Backus Co., stationery	22 85	
	989	W. F. Moore, printing	27 25	113 80
May	1003	C. M. Rousseau, printing	63 75	
	1004	Detroit News Co., stationery	19 25	

May	1005	Detroit Publishing Co., printing	$ 15 00		
	1006	Richmond, Backus Co., stationery	28 00		
	1008	Western Publishing Co., maps.	800 00		
	1019	Detroit News Co., stationery	13 97		
	1020	M. Kramar, advertising	1 50		
	1021	Michigan Arbeiter Zeitung, advertising	3 50		
	1027	F. Barcroft, maps	47 25	$	992 22
June.	1044	Sontag Herald, advertising	1 50		
	1045	Richmond, Backus Co., stationery	7 67		
	1046	C. M. Ruosseau, printing	27 50		
	1047	W. F. Moore, printing	4 25		
	1048	Evening News Co., advertising.	14 70		
	1049	Detroit Free Press Co., advertising	6 30		
	1050	Detroit Tageblatt, advertising	2 40		
	1051	Detroit News Co., stationery	5 23		69 55
				$	4,973 50

Rent.

July	523	H. N. Williams, Ungraded	$ 50 00	$	50 00
Aug.	550	H. N. Williams, Ungraded	50 00		50 00
Sept.	600	H. N. Williams, Ungraded	50 00		50 00
Oct.	664	H. N. Williams, Ungraded	50 00		50 00
Nov.	740	H. N. Williams, Ungraded	50 00		50 00
Dec.	787	H. N. Williams, Ungraded	50 00		50 00
Jan.	823	H. N. Williams, Ungraded	50 00		50 00
Mar.	912	Y. M. C. A., Graduating Class	30 00		30 00
				$	380 00

Census.

Sept.	629	Peter La Tour, Washington	$ 37 88
	630	J. Hathoefer, Everett	39 65
	631	L. E. Sickler, Wilkins	38 30
	632	H. A. Welfair, John Owen	30 60

Sept.	633	Charles Steglich, Bellefontaine.	$ 29 35		
	634	H. E. Candler, Hancock.....	19 33		
	635	Geo. L. Renaud, Cass.....	36 02		
	636	W. R. O'Neil, Jefferson.....	26 40		
	637	B. Goode, Barstow.....	35 23		
	638	P. Barry, Jackson.....	31 68		
	639	W. J. Holmes, Custer and McKinstry.....	24 48		
	640	W. W. Bishop, Irving.....	33 73	$	382 65
Oct.	666	J. P. Shanahan, Nichols.....	38 35		
	667	L. Hartwig, Campbell.....	84 50		
	668	J. Campau, Tilden and Hickey.	23 57		
	669	W. Stuart, Webster.....	43 22		
	670	P. J. M. Halley, Chaney.....	75 60		
	671	L. J. Rice, Hubbard.....	18 73		
	672	John Voit, Russell.....	104 90		
	673	W. F. Rollbuehler, Duffield ...	58 83		
	674	A. Behrens, Lincoln.....	50 28		
	675	C. Lungerhausen, Bishop.....	64 67		
	676	M. McKeogh, Brownson and Johnston.....	68 62		
	677	Wm. Stevenson, Pitcher.....	44 28		
	678	J. K. Soultz, Firnane.....	29 43		
	679	John George, Norvell.....	70 25		
	680	James McQueen, Van Dyke and Bellevue.....	38 28		
	681	Frederick J. Watson, Bagley...	26 47		
	682	D. J. Spinning, Franklin.....	28 40		
	683	N. Bostwick, Tappan.....	34 60		
	684	H. Olenbrook, Farrand and Garfield.....	45 20		
	685	P. J. M, Hickey, Clay.....	27 20		
	710	James Kelley, Houghton.....	86 45		
	711	Albert Schneider, Craft.....	26 97		
	712	Chas. Stigler, Bellefontaine....	30 00		
	713	James McQueen, Van Dyke and Bellevue.....	15 00		
	714	W. J. Holmes, McKinstry and Custer.....	15 00		
	715	J. J. Campau, Tilden and Hickey.....	12 00		

Oct.	716	H. A. Welfare, compiling.....$	40 00		
	717	L. J. Rice, Hubbard.....	15 00	$ 1,215	80
Nov.	762	Henry A. Welfare, compiling..	16 00		
	763	A. Voelkel, Ferry and Gratiot..	36 50		
	764	Frank Larke, Newberry and Livernois.....	38 15		
	765	Joseph F. Dooley, compiling census.....	16 00		
	766	Frank X. Todenbier, compiling.	18 00		
	767	W. F. Rollbuehler, Clinton.....	55 50	180	15
Dec.	796	Frank Todenbier, compiling...	28 00		
	797	Wm. Dooley, compiling.....	22 00		
	798	Wm. Dooley, compiling.....	9 00		
	799	Frank Todenbier, compiling....	12 00	71	00
				$ 1,849	60

Miscellaneous.

July.	525	W. E. Baubie, attorney, truant cases.....$	10 00		
	537	Herbert L. Reeves, clerk, Secretary's office.....	45 00		
	538	Frank Wilson, clerk, Supervisor's office	45 00	$ 100	00
Aug.	555	B. Reilly, clerk, Superintendent's office.....	75 00		
	556	John G. Hawley, attorney fees..	40 00		
	576	J. E. McIlvain, livery.....	3 00		
	577	B. Reilly, clerk, Superintendent's office.....	75 00		
	578	Frank Wilson, clerk, Supervisor's office.....	45 00		
	579	Bennett & Williams, livery.....	11 00		
	580	Herbert L. Reeves, clerk, Secretary's office.....	45 00	294	00
Sept.	607	Bennett & Williams, livery.....	19 00		
	608	J. E. McIlvain, livery.....	3 00		
	613	J. E. McIlvain, livery.....	3 00		
	627	Herbert L. Reeves, clerk, Secretary's office.....	45 00		

Sept.	628	Frank Wilson, clerk, Supervisor's office	$ 45 00	$ 115 00
Oct.	706	H. D. Edwards & Co., flag pole tackle	101 59	
	707	Moreton & Backus, lumber	7 75	
	708	H. L. Reeves, clerk, Secretary's office	55 00	
	709	F. Wilson, clerk, Supervisor's office	55 00	219 34
Nov.	727	J. C. Edmond, livery	8 00	
	760	Herbert L. Reeves, clerk, Secretary's office	55 00	
	761	Frank Wilson, clerk, Supervisor's office	55 00	118 00
Dec.	788	John Kent & Son, livery	4 00	
	790	Thomas Henderson, witness fees	5 00	
	791	Frank Wilson, clerk, Superintendent's office	55 00	
	702	Herbert L. Reeves, clerk, Secretary's office	55 00	119 00
Jan.	826	A. W. Freer, livery	7 00	
	827	C. K. Trombley, paving assessment	182 48	
	828	John Kent & Son, livery	3 00	
	849	Frank Wilson, clerk, Supervisor's office	55 00	
	850	H. L. Reeves, clerk, Secretary's office	55 00	302 48
Feb.	887	Pay-roll, inventory clerks	83 92	
	888	F. X. Todenbier, assistance Secretary's office	32 00	
	889	D. Enright, assistance Secretary's office	27 75	
	890	Tilden school fire bills	1,436 73	
	904	Pay-roll, inventory clerks	30 00	
	905	H. L. Reeves, clerk, Secretary's office	55 00	
	906	F. Wilson, clerk, Supervisor's office	55 00	
	910	Tilden School fire bills	671 15	2,391 55

Mar.	911	Workmen's pay-roll, inventory clerk.....	36 00	
	936	Workmen's pay-roll, inventory clerk.....	24 00	
	937	Workmen's pay-roll, inventory clerk.....	29 50	
	946	John Kent & Son, livery.....	2 00	
	947	Burkhardt & Walker, bill posting.....	10 00	
	960	W. E. Robinson, visiting trip...	2 75	
	961	H. L. Reeves, clerk, Secretary's office.....	55 00	
	962	F. Wilson, clerk, Supervisor's office.....	55 00	
	963	Tilden School bills, 3rd installment.....	330 22	544 47
Apr.	982	C. K. Trombly, taxes.....	24 16	
	992	H. L. Reeves, clerk, Secretary's office.....	55 00	
	933	F. Wilson, clerk, Supervisor's office.....	55 00	
	995	T. P. Tuite, taxes.....	125 95	
	997	W. E. Baubie, attorney.....	50 00	310 11
May	1010	Tilden School fire bills.....	869 40	
	1023	A. W. Freer, livery bills.....	16 50	
	1024	F. Wilson, clerk, Supervisor's office.....	55 00	
	1025	H. L. Reeves, clerk, Secretary's office.....	55 00	
	1029	E. S. Walter, University visiting trip.....	5 20	1,001 10
June.	1053	A. W. Freer, livery.....	13 00	
	1054	W. E. Baubie, balance Supreme Court expenses.....	14 00	
	1055	Frank Wilson, clerk, Supervisor's office.....	55 00	
	1058	H. L. Reeves, clerk, Secretary's office.....	55 00	137 00
				$ 5,652 05

REPAIR FUND.

Materials.

July	323	George Hanley, plastering.....$	2 00	
	327	J. W. Whiting, blacksmithing..	6 40	
	328	B. Armstrong & Co., repairing roof.....	7 00	
	329	George Uridge, teaming.....	13 76	
	330	Adam J. Orth, tin work.....	106 50	
	331	Peter Dingeman's, lumber.....	392 43	
	332	Thomas McGregor, fire boxes..	10 77	
	333	C A. Strelinger & Co., hardware.....	2 70	
	334	Francis Hyns, brick.....	142 50	
	335	W. H. Anderson & Son, blacksmithing.....	7 25	
	336	Hodgson & Howard, hardware.	2 88	
	337	S. A. Munger & Co., hardware..	16 86	
	338	Higgins & Taepke, paints.....	163 50	
	339	William Reid, paints.....	49 50	
	341	Webster & Meath, steam fittings	3 24	
	342	H. Heames & Sons, stone, lime and cement.....	131 00	
	343	Boydell Bros., paint.....	2 75	
	345	Boydell Bros., paint.....	8 80	
	346	James C. Cobb, cut stone.....	51 72	
	347	John Deppert, teaming.....	96 00	
	348	Peter Dingemans, lumber.....	226 42	
	349	H. D. Edwards & Co., gaskets..	2 25	
	350	Higgins & Taepke, paint.....	104 03	
	351	Francis Hyns, brick.....	90 00	
	352	H. Heames & Sons, sand, lime and cement.....	109 76	
	353	Kennedy & Greig, castings.....	9 98	
	354	E. W. Leach, lumber.....	318 27	
	355	S. A. Munger & Co., hardware.	36 06	
	356	Stephen Pratt, castings.....	1 25	
	357	William Reid, paints.....	50 50	
	358	Webster & Meathe, steam fittings.....	13 85	$ 2,176 96

Aug.	361	Dickinson & Hood, hardware...	$ 26 50
	362	Adam J. Orth, tin work	207 63
	363	Webster & Meathe, steam fittings.....	222 93
	364	Hodgson & Howard, hardware..	4 40
	365	H. D. Edwards & Co., gaskets..	2 82
	366	John Deppert, teaming.....	61 44
	367	Boydell Bros., paints.....	255 65
	368	W. H. Anderson & Son, blacksmithing.....	15 96
	369	Peter Dingemans, lumber.....	444 92
	370	H. Heames & Sons, sand, lime and cement.....	97 45
	371	Higgins & Taepke, paints.....	171 65
	372	E. W. Leech, lumber...	467 09
	373	Francis Hyns, brick.....	157 50
	374	S. A. Munger & Co., hardware.	2 22
	376	C. A. Strelinger & Co., hardware.....	3 05
	377	George Uridge, teaming.....	29 33
	381	A. Backus, Jr., & Son, sawdust.	1 00
	382	Boydell Bros., paint.....	70 92
	383	City of Detroit, sewer contractors.....	2 25
	384	John W. Drury, tin work.....	72 39
	385	Peter Dingemans, lumber.....	271 60
	386	Dickinson & Hood, hardware...	56 22
	387	Detroit Lead Pipe Works, steam fittings.....	1 10
	388	H. Heames & Son, sand, lime and cement.....	221 27
	389	W. E. Heames & Co., fire clay..	16 47
	390	A. Harvey & Son, steam fittings	89 44
	391	Francis Hyns, brick.....	105 00
	392	Hodgson & Howard, hardware.	4 30
	393	Higgins & Taepke, paints.....	262 72
	394	E. W. Leech, lumber.....	338 70
	395	Stephen Pratt, boiler repairs....	8 50
	396	William Reid, paints and oils...	71 49
	397	George J. Sexaur, tin work.....	17 50
	398	George Uridge, teaming.....	7 66

Aug.	399	Webster & Meathe, steam fittings	$ 210 39	
	400	C. K. Trombley, sewer assessment.....	68 84	$ 4,067 76
Sept.	404	John R. King, sundry bills.....	5 00	
	405	Geo. Hanley, plastering.....	789 89	
	406	F Schillinger, asphalt floors....	537 03	
	407	Richard Wilson, loan jack screws.....	10 00	
	408	A. Harvey & Son, steam fittings	126 53	
	409	Hodgson & Howard, hardware..	7 56	
	410	James Flower & Bros., steam fittings.....	3 48	
	411	H. D. Edwards & Co., gaskets.	9 06	
	412	Detroit Lead Pipe Works, steam fittings.....	1 20	
	413	S. A. Munger & Co , hardware.	2 39	
	414	Higgins & Taepke, paints.....	143 70	
	415	Peter Dingemans, lumber.....	209 37	
	416	Dickinson & Hood, hardware...	143 68	
	417	Chas. Dullea, plumbing.....	121 98	
	418	Jas. C. Cobb, cut stone.....	102 32	
	419	Boydell Bros., paint.....	31 38	
	420	Mason L. Brown, surveying....	6 00	
	421	W. H. Anderson, blacksmithing.....	47 72	
	422	Webster & Meathe, steam fittings	153 25	
	423	George Uridge, teaming.....	35 00	
	424	C. K. Trombley, sewer assessment.....	97 44	
	425	William Reid, glass.....	16 50	
	426	H. Heames & Son, sand, lime and cement	44 60	
	427	W. E. Heames & Co., fire clay and brick.....	38 00	
	430	H. Heames & Son, sand lime and cement.....	18 10	
	431	W. E. Heames & Son, fire brick and clay.....	43 50	
	432	A. Harvey & Son, steam fittings.	6 55	
	433	Hodgson & Howard, hardware	6 13	

Sept.	434	H. D. Edwards & Co., gaskets..$	1 92	
	435	Peter Dingemans, lumber.....	62 50	
	436	Detroit Water Commission, iron sleeve.....	1 11	
	437	Chas. Dullea, plumbing.....	5 00	
	438	W. H. Anderson & Son, blacksmithing.....	8 51	
	439	Webster & Meathe, steam fittings.....	68 32	
	441	B. Armstrong & Co., roofing cement.....	6 00	
	442	Geo. Uridge, teaming.....	19 45	$ 2,930 1
Oct.	445	W. H. Anderson & Son, blacksmithing.....	34 45	
	446	Board Public Works, repaving	20 13	
	447	H. D. Edwards & Co., gaskets..	7 17	
	448	J. Flower & Bro., steam fittings	3 56	
	449	A. Harvey & Son, steam fittings	16 09	
	450	Higgins & Taepke, paints.....	4 96	
	451	Hodgson & Howard, hardware	6 17	
	452	H. Heames & Sons, sand, lime and cement.....	16 65	
	453	W. E. Heames & Co., fire brick.	15 00	
	454	Moreton & Backus, lumber....	76 98	
	455	Stephen Pratt, boiler repairs...	30 40	
	456	George Uridge, teaming.....	23 00	
	457	Philip Uridge, sewer connection.....	2 00	
	458	Webster & Meathe, steam fittings.....	93 18	
	459	C. K. Trombley, sewer assessment.....	29 00	
	461	W. H. Anderson & Son, blacksmithing.....	12 48	
	462	Peter Dingemans, lumber.....	117 43	
	463	Dickinson & Hood, hardware...	65 19	
	464	H. D. Edwards & Co., rubber tubing.....	1 45	
	465	Faulconer & Emery, lumber...	3 38	
	466	W. E. Heames & Co., fire clay..	3 50	
	467	A. Harvey & Son, steam fittings	8 42	

Oct.	468	Hodgson & Howard, hardware...$	3 94		
	469	Kingsley & Allen Co., castings.	6 25		
	470	Thomas McGregor, boiler repairs.....	6 63		
	471	J. C. McDonald, brick.....	30 00		
	472	C. K. Trombley, sewer assessment.....	97 17		
	473	H. C. Weber & Co., hardware...	1 45		
	474	George Uridge, teaming.....	20 45	$ 756	48
Nov.	478	W. H. Anderson & Sons, blacksmithing.....	2 60		
	479	Burkhardt & Walker, paste.....	1 25		
	480	James C. Cobb, cut stone.....	6 31		
	481	Detroit Cornice Co., slate.....	2 75		
	482	Peter Dingemans, lumber.....	367 36		
	483	Chas. Dullea, plumbing.....	74 65		
	484	H. D. Edwards & Co., rubber gaskets.....	14 11		
	485	John Deppert, teaming.....	165 27		
	486	A. W. Freer, livery.....	6 00		
	487	Benj. Guiney, repairs, furnaces..	3 10		
	488	A. Harvey & Son, steam fittings	223 12		
	489	Higgins & Taepke, paints.....	34 77		
	490	Hodgson & Howard, hardware.	12 69		
	491	Kennedy & Greig, castings.....	3 33		
	492	M. C. Martin & Co., sign painting.....	2 40		
	493	Geo. J. Sexauer, tin work.....	1 80		
	494	George Uridge, teaming.....	28 67		
	495	C. K Trombley, paving assessment.....	113 76		
	496	Webster & Meathe, steam fittings.....	37 37		
	497	H. C. Weber & Co., hardware...	13 28		
	504	H. C. Weber & Co., hardware..	9 86		
	505	Webster & Meathe, steam fittings.....	16 74		
	506	C. K. Trombley, paving assessment.....	251 32		
	507	George Uridge, teaming.....	9 00		
	508	Higgins & Taepke, paints.....	73 22		

Nov.	509	A. Harvey & Sons, steam fittings ..... $	4 39	
	510	H. Heames & Sons, sand.....	7 53	
	511	W. E. Heames & Co., fire brick.	15 50	
	512	Peter Dingemans, lumber.....	82 45	
	513	Dickinson & Hood, hardware..	72 70	$ 1,657 30
Dec.	515	W. H. Anderson & Co., blacksmithing.....	3 19	
	516	Bennett & Williams, livery.....	5 50	
	517	John Deppert, teaming.....	35 00	
	518	Dickinson & Hood, hardware...	16 13	
	519	Chas. Dullea, plumbing.....	52 24	
	520	H. Heames & Sons, sand.....	14 06	
	521	A. Harvey & Sons, steam fittings.....	5 58	
	522	George Hanley, plastering.....	13 25	
	523	Higgins & Taepke, paints.....	11 48	
	524	E. W. Leech, lumber.....	10 00	
	525	Adam J. Orth , slate.....	14 50	
	526	E. B. Silliman, rubber tips.....	5 40	
	527	George Uridge, teaming.....	24 11	
	528	H. C. Weber & Co., hardware..	3 30	
	531	George Uridge, teaming.....	8 34	222 08
Jan.	234	Kennedy & Greig, castings.....	15 92	
	536	Dickinson & Hood, hardware...	58 45	
	537	Detroit Stove Works, cement..	23 50	
	538	Peter Dingemans, lumber.....	225 59	
	539	Boydell Bros., paints.....	17 75	
	540	The Allan Foundry Co., castings.....	27 64	
	541	W. H. Anderson & Son, blacksmithing.....	7 94	
	542	Geo. Uridge, teaming.....	20 78	
	543	Webster & Meathe, plumbing..	58 79	
	544	J. W. Whiting, blacksmithing.	4 82	
	545	H. C. Weber & Co., hardware..	30 52	
	546	Hodgson & Howard, hardware.	7 61	
	547	Higgins & Taepke, paints.....	14 43	
	548	H. Heames & Son, sand.....	13 24	
	550	W. E. Heames & Son, fire clay	21 25	
	551	Francis Hyns, brick..... ..	41 25	

Jan.	552	H. Heames & Son, sand.....	$ 20 45		
	553	H. C. Weber & Co., hardware..	16 95		
	554	Higgins & Taepke, paints.....	72 61		
	555	J. C. McDonald, brick.....	6 60		
	556	Stephen Pratt, boiler repairs....	12 03		
	557	George Uridge, teaming.....	14 89		
	558	A. Harvey & Son, steam fittings	36 83		
	559	Webster & Meathe, steam fittings.....	16 64		
	560	Peter Dingemans, lumber.....	29 53		
	561	John Mondawatt, excavating...	40 00	$	856 01
Feb'y	565	W. H. Anderson & Son, blacksmithing.....	44 30		
	566	H. Brushaber, chair bottoms....	6 57		
	567	Boydell Bros., paints.....	85 78		
	568	Peter Dingemans, lumber.....	210 52		
	569	Dickinson & Hood, hardware..	33 01		
	570	Dean, Godfrey & Co., sash cord	3 60		
	571	John Deppert, teaming.....	86 25		
	572	A. Harvey & Son, steam fittings	13 29		
	573	Higgins & Taepke, paint.....	36 47		
	574	Hodgson & Howard, hardware.	7 15		
	575	Stephen Pratt, boiler repairs...	69 85		
	576	Rathbone, Sard & Co., stove repairs.....	3 29		
	577	H. C. Weber & Co., hardware..	3 53		
	578	Webster & Meathe, steam fittings.....	8 20		
	579	H. Heames & Sons, sand.....	3 55		
	580	C. K. Trombly, street opening..	12 00		
	581	George Uridge, teaming.....	19 66		
	582	A. Wohlfart, moving new building.....	200 00		
	583	George Hanley, plastering.....	178 93		
	586	George Uridge, teaming.....	13 55		
	587	J. Kennedy, teaming.....	43 75		
	588	Eureka Wire Works, wire guards.....	17 88		
	589	Peter Dingemans, lumber.....	19 16		
	590	Higgins & Taepke, paints.....	4 40		
	591	H. C. Weber & Co., hardware..	3 63		

Feb'y	592	H. Heames & Sons, sand.....$	3 60		
	593	W. H. Anderson & Sons, blacksmithing.....	6 48		
	594	Webster & Meathe, steam fittings.....	1 10	$ 1,139	51
Mar.	597	Webster & Meathe, steam fittings.....	15 07		
	598	George Uridge, teaming.....	13 55		
	599	H. Heames & Sons, cement....	10 10		
	600	H. C. Weber & Co., hardware..	3 45		
	601	Higgins & Taepke, paints.....	24 83		
	602	A. Harvey & Sons, steam fittings	8 40		
	603	Dickinson & Hood, hardware..	25 94		
	604	John Deppert, teaming.....	80 50		
	606	George Hanley, plastering.....	64 14		
	607	A. W. Freer, livery.....	14 00		
	608	J. C. Edmunds, livery.....	10 00		
	609	Bennett & Williams, livery.....	2 00		
	611	Dickinson & Hood, hardware..	32 19		
	612	Peter Dingemans, lumber.....	19 62		
	613	John Deppert, teaming.....	78 16		
	614	Thos. Kennedy & Son, teaming	20 65		
	615	Chas. Dullea, plumbing.....	36 90		
	616	Geo. J. Sexauer, tin work.....	2 50		
	617	Jas. E. Davis & Co., sponges....	5 84		
	618	Webster & Meathe, fittings.....	4 20		
	619	H. C. Weber & Co., hardware..	1 65		
	620	A. Harvey & Sons, fittings.....	17 60		
	621	Boydell Bros., paint.....	21 70		
	622	H. Heames & Sons, cement.....	11 85	324	8
Apr.	625	Webster & Meathe, steam fittings.....	31 89		
	626	Dickinson & Hood, hardware...	24 04		
	627	Higgins & Taepke, paints.....	2 75		
	628	H. C. Weber & Co., hardware..	42 85		
	629	Thos. Kennedy, teaming.....	14 94		
	630	Francis Hyns, brick.....	33 00		
	631	J. T. Whiting, blacksmithing...	4 60		
	632	Geo. J. Sexauer, hardware.....	25 70		
	633	George Uridge, teaming.....	25 45		
	634	H. D. Edwards & Co., halyards.	1 13		

Apr.	635	Ralph Phelps, taxes.....$	103 14	
	638	George Uridge, teaming.....	13 90	
	639	Webster & Meathe, steam fittings.....	11 06	
	640	H. C. Weber & Co., hardware..	16 65	
	641	E. W. Leech, lumber.....	1 87	
	642	Thomas Kennedy, teaming.....	7 00	
	643	A. Harvey & Son, steam fittings	2 54	
	644	Higgins & Taepke, paints.....	25 67	
	645	H. Heames & Sons, sand and lime.....	27 45	
	646	Faulconer & Emery, flag pole..	2 10	
	647	H. D. Edwards & Co., rubber...	7 20	
	648	J. C. Edmunds, livery.....	8 00	
	649	Detroit Paper Co., paper bags..	1 50	
	650	Detroit City Glass Works, glass	3 10	
	651	Detroit Linseed Oil Co., oil....	34 65	
	652	Dickinson & Hood, hardware...	17 79	
	653	W. A. Bourke, tar.....	10 30	
	954	Boydell Bros., paints.....	2 75	
	655	W. H. Anderson & Son, blacksmithing.....	4 65	507 67
May	659	W. H. Anderson & Son, blacksmithing.....	3 25	
	660	John Deppert, teaming.....	22 55	
	691	George Uridge, teaming.....	13 11	
	662	H. Heames & Sons, sand and lime.....	44 20	
	663	Webster & Meathe, steam fittings.....	6 32	
	665	W. H. Anderson & Son, blacksmithing.....	32 72	
	667	John Deppert, teaming.....	46 61	
	668	H. D. Edwards & Co., halyards.	1 63	
	669	Higgins & Taepke, paint.....	55 65	
	670	H. Heames & Sons, sand and lime.....	31 25	
	671	A. Harvey & Son, steam fittings	5 15	
	672	George Uridge, teaming.....	13 22	
	673	H. C. Weber & Co., hardware..	14 22	
	674	Webster & Meathe, steam fittings.....	5 06	$ 294 94

June	677	John Deppert, teaming..... $	34	95	
	678	P. Dingemans, lumber.....	159	15	
	679	J. Kent & Son, livery.....	3	00	
	680	Higgins & Taepke, paint.....	43	96	
	682	Roehm & Davidson, corduroy.	20	00	
	683	Geo. J. Sexauer, tin work.....	8	57	
	684	F. Tregaskus, teaming.....	18	27	
	685	George Uridge, teaming.....	19	45	
	686	H. C. Weber & Co., hardware..	1	85	
	687	Webster & Meathe, steam fittings.....	112	41	
	688	Dickinson & Hood, hardware..	107	00	
	689	H. D. Edwards & Co., twine...	2	25	
	690	F. Hyns & Co., brick.....	236	50	
	691	H. Heames & Sons, sand and lime.....	57	25	
	692	W. H. Anderson & Sons, blacksmithing.....	3	60	
	693	Jas. C. Cobb, cut stone.....	111	23	
	694	J..Doody, teaming.....	10	00	
	696	Geo. Hanley, plastering.....	57	55	
	697	Adamant Wall Plaster, adamant	8	40	
	698	P. Dingemans, lumber.....	95	91	
	699	J. Doody, teaming.....	12	05	
	700	J. Deppert, teaming.....	22	55	
	701	J. W. Whiting, blacksmithing..	10	35	$ 1,1
					$ 16,4

Labor.

July	340	Workmen's pay-roll, repairing. $	1,561	90		
	359	" " "	2,133	75	$ 3,6	
Aug.	375	Workmen's pay-roll, repairing.	2,221	06		
	378	" " "	52	00		
	379	" " "	1,158	22		
	380	" " "	909	74		
	402	" " "	847	73	5,1	
Sept.	403	Workmen's pay-roll, repairing.	738	06		
	428	" " "	350	48		
	429	" " "	315	13		
	440	" " "	468	93	1,8	

Oct.	443	Workmen's pay-roll, repairing.	$ 406 85		
	444	" " "	379 14		
	460	" " "	351 28		
	475	" " "	334 54	$ 1,471	81
Nov.	476	Workmen's pay-roll, repairing.	253 80		
	477	" " "	214 14		
	478	" " "	141 35		
	502	" " "	248 21		
	503	" " "	154 88	1,012	38
Dec.	514	Workmen's pay-roll, repairing.	179 86		
	529	" " "	256 01		
	530	" " "	234 88		
	532	" " "	190 17	860	92
Jan.	533	Workmen's pay-roll, repairing.	250 29		
	535	" " "	353 09		
	549	" " "	279 68		
	562	" " "	257 11		
	563	" " "	174 20	1,314	37
Feb'y.	564	Workmen's pay-roll, repairing.	151 81		
	584	" " "	202 82		
	585	" " "	235 84		
	595	" " "	301 90	892	37
Mar.	596	Workmen's pay-roll, repairing.	222 67		
	605	" " "	247 72		
	610	" " "	214 45		
	623	" " "	191 01	875	85
Apr.	624	Workmen's pay-roll, repairing..	242 44		
	636	" " "	213 03		
	637	" " "	191 85		
	656	" " "	238 75	886	07
May	657	Workmen's pay-roll, repairing..	277 22		
	653	" " "	291 39		
	664	" " "	310 67		
	666	" " "	383 68		
	675	" " "	395 65	1,658	61
June	676	Workmen's pay-roll, repairing.	290 87		
	681	" " "	402 40		
	695	" " "	371 22		
	702	" " "	418 22	1,482	71
				$ 21,212	09

SALARY FUND.

July	71	W. E. Robinson, July salary....	$ 333 33	
	72	Jno. R. King, " "	208 33	
	73	Robert Wallace, " "	166 66	
	74	Janitor's pay-roll, " "	1,935 00	$ 2,643 32
Aug.	75	Janitor's pay-roll, August salary	1,935 00	
	76	W. E. Robinson, " "	333 33	
	77	John R. King, " "	208 33	
	78	Robert Wallace, " "	166 66	2,643 32
Sept.	79	Teachers' pay-roll, September salaries...	28,702 50	
	80	Janitors' pay-roll, September salaries.....	1,935 00	
	81	Robert Wallace, September salary.....	166 66	
	82	Jno. R. King, September salary.	208 33	
	83	W. E. Robinson, September salary.....	333 33	
	84	W. E. Baubie, August and September salaries.....	100 00	31,445 82
Oct.	85	W. E. Robinson, October salary	333 33	
	86	Jno. R. King, " "	208 33	
	87	R. Wallace, " "	166 66	
	88	W. E. Baubie, " "	50 00	
	89	Janitors' pay-roll, October salaries.....	2,074 00	2,832 32
Nov.	90	Teachers' pay-roll, October salaries.....	29,940 00	
	91	William Hay, substitute janitor	55 00	
	92	Janitors' pay-roll, November salary.....	2,235 00	
	93	W. E. Robinson, November salary.....	333 33	
	94	Jno. R. King, November salary	208 33	
	95	Robert Wallace, November salary.....	166 66	
	96	W. E. Baubie, November salary	50 00	32,988 32
Dec.	97	Teachers' pay-roll, November salaries.....	30,779 50	

Dec.	98	Teachers' pay-roll, December salaries	$30,572 75		
	99	Janitors' pay-roll, December salaries	2,278 00		
	100	W. E. Robinson, December salary	333 33		
	101	John R. King, December salary	208 33		
	102	Robert Wallace	166 66		
	103	W. E. Baubie	50 00	$64,388	57
Jan.	104	Janitors, pay-roll, January salaries	2,374 00		
	105	W. E. Robinson, January salary	333 33		
	106	John R. King, "	208 33		
	107	Robert Wallace, "	166 66		
	108	W. E. Baubie, "	50 00		
	109	Teachers' pay-roll, "	30,567 00	33,699	32
Feb.	110	Wm. Emblin, substitute janitor	25 00		
	111	Janitors' pay-roll, February salaries	2,581 00		
	112	W. E. Robinson, February salary	333 33		
	113	John R. King, February salary	208 33		
	114	Robert Wallace, February salary	166 66		
	115	W. E. Baubie, February salary.	50 00		
	116	Teachers' pay-roll, February salaries	31,832 25	35,176	57
Mar.	118	Janitors' pay-roll, March salaries	2,531 00		
	119	Teachers' " " "	30,707 25		
	120	W. E. Robinson, March salary.	333 33		
	121	John R. King, " " .	208 33		
	122	Robert Wallace, " " .	166 66		
	123	W. E. Baubie, " " .	50 00		
	124	W. F. Rollbuehler, extra help..	13 50	31,510	07
Apr.	125	Janitor's pay-roll, April salary...	2,376 00		
	126	W. E. Robinson, " ..	333 33		
	127	John R. King, " ..	208 33		
	128	R. Wallace, " ..	166 66		
	129	W. E. Baubie, " ..	50 00	3,134	32

May	130	Teacher's pay-roll, April salaries	$30,137	37	
	131	Janitors' pay-roll, May salaries..	2,267	00	
	132	W. E. Robinson, May salary....	333	33	
	133	John R. King, "	208	33	
	134	R. Wallace, "	166	66	
	135	W. E. Baubie, "	50	00	
	136	Teachers' pay-roll, "	30,086	75	$33,149
June	137	Teachers' pay-roll, June salaries	30,006	50	
	138	W. E. Robinson, "	333	37	
	139	John R. King, "	208	37	
	140	R. Wallace, "	166	74	
	141	W. E. Baubie, "	83	33	
	142	Janitors' pay-roll, June salaries.	2,259	50	33,053
		Total amount expended.....			$339,289

EXPENDITURES BY SCHOOLS.

BAGLEY SCHOOL.

MRS. MARGARET E. MONAGHAN, PRINCIPAL.

Cor. Fourteenth and Pine Streets.

Teachers	$ 4,022 50	
Janitors	390 00	
Coal	200 00	
Taxes	89 30	
Repairs	84 24	
Water tax	12 00	
Gaskets	4 31	
Weighing coal	4 00	
Tin work	2 75	
Paint	40	
Fittings	20	
		$ 4,809 70

BARSTOW SCHOOL.

MISS CAROLINE CROSMAN, PRINCIPAL.

Larned, near Riopelle Street.

Teachers	$ 9,962 50	
Janitor	690 00	
Coal	319 20	
Repairs	251 60	
Wood	35 11	
Water tax	25 00	
Purifier	21 60	
Lumber	12 58	
Kindling	9 96	
Hardware	7 22	
Wood piling	5 67	
Weighing coal	5 65	
Paint	5 40	

Gaskets	$ 2 04	
Tuning piano	2 00	
Castings	2 00	
Leather	50	
Pegs	25	
		$20,843 97

BROWNSON SCHOOL.

MISS AUGUSTA D. SCHRADER, PRINCIPAL.

Maple Street, between Chene and Jos. Campau.

Teachers	$ 3,124 50	
Janitor	373 00	
Coal	161 20	
Repairs	113 39	
Taxes	50 19	
Water tax	20 00	
Wood	17 63	
Lumber	11 90	
Trees	11 70	
Wood-piling	6 01	
Weighing coal	6 00	
Kindling	4 98	
Hardware	2 25	
Sawing wood	1 23	
Seating	80	
Paint	29	
		$ 3,905 07

CAMPBELL SCHOOL.

MISS ALBINA ALDRIDGE, PRINCIPAL,

Cor. St. Aubin and Alexandrine Avenues.

Teachers	$3,375 00
Janitor	362 00
Wood	169 85
Repairs	152 51
Lumber	80 96
Wood piling	18 81
Labor	14 48
Repairing shades	12 73
Sawing wood	12 25

r tax...	$ 12 00	
ware	8 95	
ing	6 96	
	36	
		$ 4,226 86

CASS SCHOOL.

MR. SAMUEL WHITNEY, PRINCIPAL.

Corner Grand River and Second Avenues.

ıers	$15,357 50	
ɔr	1,080 00	
irs	441 60	
	353 00	
ɔer	150 07	
iring boiler	70 35	
vork	66 44	
r tax	35 00	
:ring	24 82	
sman	23 20	
l	21 66	
	21 25	
lators	13 20	
: bars	12 03	
iring shades	10 56	
hing coal	8 50	
ı mower	7 22	
ware	7 15	
ıgs	6 72	
bing	5 00	
l piling	4 75	
ling	3 73	
ngs	3 33	
	3 01	
ıer	2 81	
ng wood	1 80	
:ys	1 08	
:smithing	36	
		$17,736 14

Repairing clock	$ 4 05	
Framing	3 50	
Sawing wood	3 20	
Grate	3 10	
Books	1 02	
Tuning piano	2 00	
		$11,368

BELLEFONTAINE SCHOOL.

MISS MAGGIE M. LENAHAN, PRINCIPAL.

Morrell Street, near Fort.

Teachers	$ 5,747 00	
Janitor	626 00	
Coal	205 40	
Repairs	147 24	
Water tax	20 00	
Kindling	11 82	
Teaming	11 66	
Weighing coal	7 90	
Lumber	10 36	
Livery	3 00	
Wood piling	2 00	
Hardware	1 60	
Repairing clock	45	
		$ 6,994

BELLEVUE SCHOOL.

MRS. ANNA DEVINE, PRINCIPAL.

Bellevue Avenue, near Champlain Street.

Teachers	$ 2,037 50	
Janitor	249 00	
Repairs	74 95	
Wood	38 67	
Lumber	30 15	
Taxes	10 55	
Water tax	6 00	
Repairing shades	4 46	
Sawing wood	2 80	
Castings	2 40	
Hardware	2 05	

Wood piling	$ 1 61	
Glass	74	
Express	38	
Teaming	19	
		$ 2,461 45

BISHOP SCHOOL.

MR. LEWIS G. GORTON, PRINCIPAL.

Winder Street, bet. Hastings and Rivard.

Teachers	$14,594 50	
Repairs	2,831 04	
Janitor	1,160 00	
Coal	534 00	
Tuition rebate	3 00	
Lumber	306 36	
Teaming	266 78	
Brick	269 50	
Sand	144 96	
Fittings	119 57	
Hardware	95 85	
Cut stone	77 80	
Wood	64 35	
Gas	62 71	
Water tax	45 00	
Clay	38 00	
Blacksmithing	36 55	
Boiler repairs	30 40	
Lime	27 45	
Drafting	22 80	
Repairing shades	16 56	
Kindling	16 18	
Weighing coal	13 00	
Cloth	12 66	
Tar	10 30	
Tin work	8 57	
Grate bars	7 80	
Wood piling	7 05	
Paint	6 62	
Sawing wood	5 10	
Tuition rebate	3 00	
Stationery	2 72	

Gaskets	$ 2 04	
Tuning piano	2 00	
Castings	2 00	
Leather	50	
Pegs	25	
		$20,843 97

BROWNSON SCHOOL.

MISS AUGUSTA D. SCHRADER, PRINCIPAL.

Maple Street, between Chene and Jos. Campau.

Teachers	$ 3,124 50	
Janitor	373 00	
Coal	161 20	
Repairs	113 39	
Taxes	50 19	
Water tax	20 00	
Wood	17 63	
Lumber	11 90	
Trees	11 70	
Wood-piling	6 01	
Weighing coal	6 00	
Kindling	4 98	
Hardware	2 25	
Sawing wood	1 23	
Seating	80	
Paint	29	
		$ 3,905 07

CAMPBELL SCHOOL.

MISS ALBINA ALDRIDGE, PRINCIPAL.

Cor. St. Aubin and Alexandrine Avenues.

Teachers	$3,375 00	
Janitor	362 00	
Wood	169 85	
Repairs	152 51	
Lumber	80 96	
Wood piling	18 81	
Labor	14 48	
Repairing shades	12 73	
Sawing wood	12 25	

.....$	12 00	
.....	8 95	
....	6 96	
.....	36	
		$ 4,226 86

CASS SCHOOL.

4R. SAMUEL WHITNEY, PRINCIPAL.

ner Grand River and Second Avenues.

.....$	15,357 50	
.....	1,080 00	
....	441 60	
.....	353 00	
.....	150 07	
er.....	70 35	
.....	66 44	
.....	35 00	
....	24 82	
.....	23 20	
.....	21 66	
....	21 25	
.....	13 20	
.....	12 03	
les	10 56	
.....	8 50	
... .	7 22	
.....	7 15	
.....	6 72	
.....	5 00	
.....	4 75	
.....	3 73	
....	3 33	
....	3 01	
.....	2 81	
.....	1 80	
.....	1 08	
....	36	
		$17,736 14

CHANEY SCHOOL.

MISS MARION LAW, PRINCIPAL.

Sullivan Avenue, near Linden Street.

Teachers	$ 3,212 50	
Janitor	390 00	
Coal	124 80	
Repairs	123 20	
Water tax	18 00	
Taxes	16 01	
Wood	13 61	
Lumber	8 84	
Kindling	8 09	
Weighing coal	4 80	
Fittings	4 06	
Teaming	3 50	
Hardware	2 99	
Wood-piling	1 61	
Sawing wood	1 20	
		$ 3,933

CLAY SCHOOL.

MISS ABIGAIL A. MICHAELS, PRINCIPAL.

Pitcher Street, near Cass Avenue.

Teachers	$ 4,987 50	
Janitor	540 00	
Repairs	145 59	
Coal	137 80	
Teaming	85 94	
Water tax	25 00	
Wood	15 47	
Hardware	8 43	
Weighing coal	5 30	
Kindling	4 98	
Sand	4 20	
Fittings	3 90	
Wood piling	2 75	
Paint	2 42	
Sawing wood	1 13	
Lumber	86	
		$ 5,971

CLINTON SCHOOL.

MR. WALES C. MARTINDALE, PRINCIPAL.

Clinton Avenue, near Rivard Street.

Teachers	$ 5,050 00	
Janitor	590 25	
Repairs	398 00	
Plastering	178 93	
Coal	152 80	
Lumber	123 67	
Wood	20 42	
Water tax	16 00	
Blacksmithing	10 67	
Teaming	8 16	
Kindling	8 09	
Piling wood	6 36	
Hardware	5 07	
Repairing shades	4 50	
Weighing coal	4 10	
Paint	3 02	
Sand	1 73	
Sawing wood	1 60	
Fittings	1 32	
Gaskets	24	
		$ 6,584 93

CRAFT SCHOOL.

MISS SARAH M. HOWARD, PRINCIPAL.

Vinewood Avenue and Ash Street.

Teachers	$ 2,143 00	
Janitor	304 00	
Repairs	162 63	
Coal	30 00	
Purifier	20 70	
Wood	18 56	
Lumber	12 17	
Hardware	10 97	
Kindling	9 37	
Fittings	8 25	
Water tax	8 00	
Plumbing	3 99	

Wood piling	$ 1 61	
Sawing wood	1 60	
Weighing coal	60	
		$ 2,735 45

CUSTER SCHOOL.

MISS MARY E. MARKEY, PRINCIPAL.

Hammond near Ranspach Street.

Teachers	$ 1,200 00	
Janitor	180 00	
Repairs	77 43	
Coal	60 00	
Wood	14 85	
Taxes	11 80	
Water tax	8 00	
Hardware	6 10	
Sawing wood	1 20	
Weighing coal	1 20	
Wood piling	1 00	
Stove repairs	60	
		$ 1,562 18

DICKINSON SCHOOL.

MISS ELVIRA E. EDENS, PRINCIPAL.

Twelfth and Brigham Streets.

Mason work	$ 4,978 00	
Lots	3,300 00	
Carpenter work	2,841 22	
Heating and ventilation	1,897 50	
Plastering	980 00	
Cut stone	926 25	
Galvanized iron and tin and slate roofing	666 72	
Painting and glazing	203 15	
Taxes	191 67	
Repairs	157 72	
Labor	117 06	
Paving	113 76	
Iron and wire work	53 18	
Abstract	34 40	
Draftsman	34 40	
Trees	12 60	

.....$	8 00	
g.....	6 50	
hing	4 50	
.....	4 14	
.....	3 50	
....	2 10	
; deed.....	1 00	
	———	$16,537 07

DUFFIELD SCHOOL.

MR. WM. A. ELLIS, PRINCIPAL.

Clinton Avenue, near Chene Street.

....$	10,937 50	
.....	800 00	
.....m.....	479 27	
.....	316 80	
....	32 00	
.....m.....	27 49	
pairing.....	18 40	
.....	14 24	
....	12 00	
coal.....	6 60	
... .	3 48	
.....	3 10	
ood.....	1 40	
.....	80	
....	67	
ing.....	25	
	———	$12,654 00

EVERETT SCHOOL.

LOUISE E. ROHNERT, PRINCIPAL.

Fort Street near Hastings.

.....$	8,097 50	
....	690 00	
.....	249 00	
.....	97 56	
.....	75 00	
.....	25 00	
....	20 42	
; shades.....	13 13.	

Wood piling	$ 1 61	
Sawing wood	1 60	
Weighing coal	60	
		$ 2,735 45

CUSTER SCHOOL.

MISS MARY E. MARKEY, PRINCIPAL.

Hammond near Ranspach Street.

Teachers	$ 1,200 00	
Janitor	180 00	
Repairs	77 43	
Coal	60 00	
Wood	14 85	
Taxes	11 80	
Water tax	8 00	
Hardware	6 10	
Sawing wood	1 20	
Weighing coal	1 20	
Wood piling	1 00	
Stove repairs	60	
		$ 1,562 18

DICKINSON SCHOOL.

MISS ELVIRA E. EDENS, PRINCIPAL.

Twelfth and Brigham Streets.

Mason work	$ 4,978 00
Lots	3,300 00
Carpenter work	2,841 22
Heating and ventilation	1,897 50
Plastering	980 00
Cut stone	926 25
Galvanized iron and tin and slate roofing	666 72
Painting and glazing	203 15
Taxes	191 67
Repairs	157 72
Labor	117 06
Paving	113 76
Iron and wire work	53 18
Abstract	34 40
Draftsman	34 40
Trees	12 60

Surveying	$ 8 00	
Bill posting	6 50	
Blacksmithing	4 50	
Lumber	4 14	
Teaming	3 50	
Flag pole	2 10	
Recording deed	1 00	
		$16,537 07

DUFFIELD SCHOOL.

MR. WM. A. ELLIS, PRINCIPAL.

Clinton Avenue, near Chene Street.

Teachers	$10,937 50	
Janitor	800 00	
Repairs	479 27	
Coal	316 80	
Water tax	32 00	
Teaming	27 49	
Shade repairing	18 40	
Hardware	14 24	
Lumber	12 00	
Weighing coal	6 60	
Paint	3 48	
Tin work	3 10	
Sawing wood	1 40	
Drafting	80	
Seating	67	
Wood piling	25	
		$12,654 00

EVERETT SCHOOL.

LOUISE E. ROHNERT, PRINCIPAL.

Fort Street near Hastings.

Teachers	$ 8,097 50	
Janitors	690 00	
Coal	249 00	
Repairs	97 56	
Piano	75 00	
Water tax	25 00	
Wood	20 42	
Repairing shades	13 13	

Wood piling	$ 1 61	
Sawing wood	1 60	
Weighing coal	60	
		$ 2,735 45

CUSTER SCHOOL.

MISS MARY E. MARKEY, PRINCIPAL.

Hammond near Ranspach Street.

Teachers	$ 1,200 00
Janitor	180 00
Repairs	77 43
Coal	60 00
Wood	14 85
Taxes	11 80
Water tax	8 00
Hardware	6 10
Sawing wood	1 20
Weighing coal	1 20
Wood piling	1 00
Stove repairs	60
	$ 1,562 18

DICKINSON SCHOOL.

MISS ELVIRA E. EDENS, PRINCIPAL.

Twelfth and Brigham Streets.

Mason work	$ 4,978 00
Lots	3,300 00
Carpenter work	2,841 22
Heating and ventilation	1,897 50
Plastering	980 00
Cut stone	926 25
Galvanized iron and tin and slate roofing	666 72
Painting and glazing	203 15
Taxes	191 67
Repairs	157 72
Labor	117 06
Paving	113 76
Iron and wire work	53 18
Abstract	34 40
Draftsman	34 40
Trees	12 60

Surveying	$ 8 00	
Bill posting	6 50	
Blacksmithing	4 50	
Lumber	4 14	
Teaming	3 50	
Flag pole	2 10	
Recording deed	1 00	
		$16,537 07

DUFFIELD SCHOOL.

MR. WM. A. ELLIS, PRINCIPAL.

Clinton Avenue, near Chene Street.

Teachers	$10,937 50	
Janitor	800 00	
Repairs	479 27	
Coal	316 80	
Water tax	32 00	
Teaming	27 49	
Shade repairing	18 40	
Hardware	14 24	
Lumber	12 00	
Weighing coal	6 60	
Paint	3 48	
Tin work	3 10	
Sawing wood	1 40	
Drafting	80	
Seating	67	
Wood piling	25	
		$12,654 00

EVERETT SCHOOL.

LOUISE E. ROHNERT, PRINCIPAL.

Fort Street near Hastings.

Teachers	$ 8,097 50	
Janitors	690 00	
Coal	249 00	
Repairs	97 56	
Piano	75 00	
Water tax	25 00	
Wood	20 42	
Repairing shades	13 13	

Aug.	361	Dickinson & Hood, hardware...	$ 26 50
	362	Adam J. Orth, tin work	207 63
	363	Webster & Meathe, steam fittings.....	222 93
	364	Hodgson & Howard, hardware..	4 40
	365	H. D. Edwards & Co., gaskets..	2 82
	366	John Deppert, teaming.....	61 44
	367	Boydell Bros., paints.....	255 65
	368	W. H. Anderson & Son, blacksmithing.....	15 96
	369	Peter Dingemans, lumber.....	444 92
	370	H. Heames & Sons, sand, lime and cement.....	97 45
	371	Higgins & Taepke, paints.....	171 65
	372	E. W. Leech, lumber...	467 09
	373	Francis Hyns, brick.....	157 50
	374	S. A. Munger & Co., hardware.	2 22
	376	C. A. Strelinger & Co., hardware.....	3 05
	377	George Uridge, teaming.....	29 33
	381	A. Backus, Jr., & Son, sawdust.	1 00
	382	Boydell Bros., paint.....	70 92
	383	City of Detroit, sewer contractors.....	2 25
	384	John W. Drury, tin work.....	72 39
	385	Peter Dingemans, lumber.....	271 60
	386	Dickinson & Hood, hardware...	56 22
	387	Detroit Lead Pipe Works, steam fittings.....	1 10
	388	H. Heames & Son, sand, lime and cement.....	221 27
	389	W. E. Heames & Co., fire clay..	16 47
	390	A. Harvey & Son, steam fittings	89 44
	391	Francis Hyns, brick.....	105 00
	392	Hodgson & Howard, hardware.	4 30
	393	Higgins & Taepke, paints.....	262 72
	394	E. W. Leech, lumber.....	338 70
	395	Stephen Pratt, boiler repairs....	8 50
	396	William Reid, paints and oils...	71 49
	397	George J. Sexaur, tin work.....	17 50
	398	George Uridge, teaming.....	7 66

Aug.	399	Webster & Meathe, steam fittings	$ 210	39	
	400	C. K. Trombley, sewer assessment	68	84	$ 4,067 76
Sept.	404	John R. King, sundry bills	5	00	
	405	Geo. Hanley, plastering	789	89	
	406	F Schillinger, asphalt floors	537	03	
	407	Richard Wilson, loan jack screws	10	00	
	408	A. Harvey & Son, steam fittings	126	53	
	409	Hodgson & Howard, hardware	7	56	
	410	James Flower & Bros., steam fittings	3	48	
	411	H. D. Edwards & Co., gaskets.	9	06	
	412	Detroit Lead Pipe Works, steam fittings	1	20	
	413	S. A. Munger & Co , hardware.	2	39	
	414	Higgins & Taepke, paints	143	70	
	415	Peter Dingemans, lumber	209	37	
	416	Dickinson & Hood, hardware	143	68	
	417	Chas. Dullea, plumbing	121	98	
	418	Jas. C. Cobb, cut stone	102	32	
	419	Boydell Bros., paint	31	38	
	420	Mason L. Brown, surveying	6	00	
	421	W. H. Anderson, blacksmithing	47	72	
	422	Webster & Meathe, steam fittings	153	25	
	423	George Uridge, teaming	35	00	
	424	C. K. Trombley, sewer assessment	97	44	
	425	William Reid, glass	16	50	
	426	H. Heames & Son, sand, lime and cement	44	60	
	427	W. E. Heames & Co., fire clay and brick	38	00	
	430	H. Heames & Son, sand lime and cement	18	10	
	431	W. E. Heames & Son, fire brick and clay	43	50	
	432	A. Harvey & Son, steam fittings.	6	55	
	433	Hodgson & Howard, hardware	6	13	

Sept.	434	H. D. Edwards & Co., gaskets.. $	1 92	
	435	Peter Dingemans, lumber.....	62 50	
	436	Detroit Water Commission, iron sleeve.....	1 11	
	437	Chas. Dullea, plumbing.....	5 00	
	438	W. H. Anderson & Son, blacksmithing.....	8 51	
	439	Webster & Meathe, steam fittings.....	68 32	
	441	B. Armstrong & Co., roofing cement.....	6 00	
	442	Geo. Uridge, teaming.....	19 45	$ 2,930 17
Oct.	445	W. H. Anderson & Son, blacksmithing.....	34 45	
	446	Board Public Works, repaving	20 13	
	447	H. D. Edwards & Co., gaskets..	7 17	
	448	J. Flower & Bro., steam fittings	3 56	
	449	A. Harvey & Son, steam fittings	16 09	
	450	Higgins & Taepke, paints.....	4 96	
	451	Hodgson & Howard, hardware	6 17	
	452	H. Heames & Sons, sand, lime and cement.....	16 65	
	453	W. E. Heames & Co., fire brick.	15 00	
	454	Moreton & Backus, lumber....	76 98	
	455	Stephen Pratt, boiler repairs...	30 40	
	456	George Uridge, teaming.....	23 00	
	457	Philip Uridge, sewer connection.....	2 00	
	458	Webster & Meathe, steam fittings.....	93 18	
	459	C. K. Trombley, sewer assessment.....	29 00	
	461	W. H. Anderson & Son, blacksmithing.....	12 48	
	462	Peter Dingemans, lumber.....	117 43	
	463	Dickinson & Hood, hardware...	65 19	
	464	H. D. Edwards & Co., rubber tubing.....	1 45	
	465	Faulconer & Emery, lumber...	3 38	
	466	W. E. Heames & Co., fire clay..	3 50	
	467	A. Harvey & Son, steam fittings	8 42	

Oct.	468	Hodgson & Howard, hardware...$	3 94		
	469	Kingsley & Allen Co., castings.	6 25		
	470	Thomas McGregor, boiler repairs.....	6 63		
	471	J. C. McDonald, brick.....	30 00		
	472	C. K. Trombley, sewer assessment.....	97 17		
	473	H. C. Weber & Co., hardware...	1 45		
	474	George Uridge, teaming.....	20 45	$ 756	48
Nov.	478	W. H. Anderson & Sons, blacksmithing.....	2 60		
	479	Burkhardt & Walker, paste.....	1 25		
	480	James C. Cobb, cut stone.....	6 31		
	481	Detroit Cornice Co., slate.....	2 75		
	482	Peter Dingemans, lumber.....	367 36		
	483	Chas. Dullea, plumbing.....	74 65		
	484	H. D. Edwards & Co., rubber gaskets.....	14 11		
	485	John Deppert, teaming.....	165 27		
	486	A. W. Freer, livery.....	6 00		
	487	Benj. Guiney, repairs, furnaces..	3 10		
	488	A. Harvey & Son, steam fittings	223 12		
	489	Higgins & Taepke, paints.....	34 77		
	490	Hodgson & Howard, hardware.	12 69		
	491	Kennedy & Greig, castings.....	3 33		
	492	M. C. Martin & Co., sign painting.....	2 40		
	493	Geo. J. Sexauer, tin work.....	1 80		
	494	George Uridge, teaming.....	28 67		
	495	C. K Trombley, paving assessment.....	113 76		
	496	Webster & Meathe, steam fittings.....	37 37		
	497	H. C. Weber & Co., hardware...	13 28		
	504	H. C. Weber & Co., hardware..	9 86		
	505	Webster & Meathe, steam fittings.....	16 74		
	506	C. K. Trombley, paving assessment.....	251 32		
	507	George Uridge, teaming.....	9 00		
	508	Higgins & Taepke, paints.....	73 22		

Nov.	509	A. Harvey & Sons, steam fittings.....$	4 39		
	510	H. Heames & Sons, sand.....	7 53		
	511	W. E. Heames & Co., fire brick.	15 50		
	512	Peter Dingemans, lumber.....	82 45		
	513	Dickinson & Hood, hardware..	72 70	$ 1,657	30
Dec.	515	W. H. Anderson & Co., blacksmithing.....	3 19		
	516	Bennett & Williams, livery.....	5 50		
	517	John Deppert, teaming.....	35 00		
	518	Dickinson & Hood, hardware...	16 13		
	519	Chas. Dullea, plumbing.....	52 24		
	520	H. Heames & Sons, sand.....	14 06		
	521	A. Harvey & Sons, steam fittings.....	5 58		
	522	George Hanley, plastering.....	13 25		
	523	Higgins & Taepke, paints.....	11 48		
	524	E. W. Leech, lumber.....	10 00		
	525	Adam J. Orth , slate.....	14 50		
	526	E. B. Silliman, rubber tips.....	5 40		
	527	George Uridge, teaming.....	24 11		
	528	H. C. Weber & Co., hardware..	3 30		
	531	George Uridge, teaming.....	8 34	222	08
Jan.	234	Kennedy & Greig, castings.....	15 92		
	536	Dickinson & Hood, hardware...	58 45		
	537	Detroit Stove Works, cement..	23 50		
	538	Peter Dingemans, lumber.....	225 59		
	539	Boydell Bros., paints.....	17 75		
	540	The Allan Foundry Co., castings.....	27 64		
	541	W. H. Anderson & Son, blacksmithing.....	7 94		
	542	Geo. Uridge, teaming.....	20 78		
	543	Webster & Meathe, plumbing..	58 79		
	544	J. W. Whiting, blacksmithing.	4 82		
	545	H. C. Weber & Co., hardware..	30 52		
	546	Hodgson & Howard, hardware.	7 61		
	547	Higgins & Taepke, paints.....	14 43		
	548	H. Heames & Son, sand.....	13 24		
	550	W. E. Heames & Son, fire clay	21 25		
	551	Francis Hyns, brick..... ..	41 25		

Jan.	552	H. Heames & Son, sand.....$	20 45		
	553	H. C. Weber & Co., hardware..	16 95		
	554	Higgins & Taepke, paints.....	72 61		
	555	J. C. McDonald, brick.....	6 60		
	556	Stephen Pratt, boiler repairs....	12 03		
	557	George Uridge, teaming.....	14 89		
	558	A. Harvey & Son, steam fittings	36 83		
	559	Webster & Meathe, steam fittings.....	16 64		
	560	Peter Dingemans, lumber.....	29 53		
	561	John Mondawatt, excavating...	40 00	$	856 01
Feb'y	565	W. H. Anderson & Son, blacksmithing.....	44 30		
	566	H. Brushaber, chair bottoms....	6 57		
	567	Boydell Bros., paints.....	85 78		
	568	Peter Dingemans, lumber.....	210 52		
	569	Dickinson & Hood, hardware..	33 01		
	570	Dean, Godfrey & Co., sash cord	3 60		
	571	John Deppert, teaming.....	86 25		
	572	A. Harvey & Son, steam fittings	13 29		
	573	Higgins & Taepke, paint.....	36 47		
	574	Hodgson & Howard, hardware.	7 15		
	575	Stephen Pratt, boiler repairs...	69 85		
	576	Rathbone, Sard & Co., stove repairs.....	3 29		
	577	H. C. Weber & Co., hardware..	3 53		
	578	Webster & Meathe, steam fittings.....	8 20		
	579	H. Heames & Sons, sand.....	3 55		
	580	C. K. Trombly, street opening..	12 00		
	581	George Uridge, teaming.....	19 66		
	582	A. Wohlfart, moving new building.....	200 00		
	583	George Hanley, plastering.....	178 93		
	586	George Uridge, teaming.....	13 55		
	587	J. Kennedy, teaming.....	43 75		
	588	Eureka Wire Works, wire guards.....	17 88		
	589	Peter Dingemans, lumber.....	19 16		
	590	Higgins & Taepke, paints.....	4 40		
	591	H. C. Weber & Co., hardware..	3 63		

Feb'y	592	H. Heames & Sons, sand.....$	3 60	
	593	W. H. Anderson & Sons, blacksmithing.....	6 48	
	594	Webster & Meathe, steam fittings.....	1 10	$ 1,139 50
Mar.	597	Webster & Meathe, steam fittings.....	15 07	
	598	George Uridge, teaming.....	13 55	
	599	H. Heames & Sons, cement....	10 10	
	600	H. C. Weber & Co., hardware..	3 45	
	601	Higgins & Taepke, paints.....	24 83	
	602	A. Harvey & Sons, steam fittings	8 40	
	603	Dickinson & Hood, hardware..	25 94	
	604	John Deppert, teaming.....	80 50	
	606	George Hanley, plastering.....	64 14	
	607	A. W. Freer, livery.....	14 00	
	608	J. C. Edmunds, livery.....	10 00	
	609	Bennett & Williams, livery.....	2 00	
	611	Dickinson & Hood, hardware..	32 19	
	612	Peter Dingemans, lumber.....	19 62	
	613	John Deppert, teaming.....	78 16	
	614	Thos. Kennedy & Son, teaming	20 65	
	615	Chas. Dullea, plumbing.....	36 90	
	616	Geo. J. Sexauer, tin work.....	2 50	
	617	Jas. E. Davis & Co., sponges....	5 84	
	618	Webster & Meathe, fittings.....	4 20	
	619	H. C. Weber & Co., hardware..	1 65	
	620	A. Harvey & Sons, fittings.....	17 60	
	621	Boydell Bros., paint.....	21 70	
	622	H. Heames & Sons, cement.....	11 85	324 84
Apr.	625	Webster & Meathe, steam fittings.....	31 89	
	626	Dickinson & Hood, hardware...	24 04	
	627	Higgins & Taepke, paints.....	2 75	
	628	H. C. Weber & Co., hardware..	42 85	
	629	Thos. Kennedy, teaming.....	14 94	
	630	Francis Hyns, brick.....	33 00	
	631	J. T. Whiting, blacksmithing...	4 60	
	632	Geo. J. Sexauer, hardware.....	25 70	
	633	George Uridge, teaming.....	25 45	
	634	H. D. Edwards & Co., halyards.	1 13	

Apr.	635	Ralph Phelps, taxes.....$	103 14	
	638	George Uridge, teaming.....	13 90	
	639	Webster & Meathe, steam fittings.....	11 06	
	640	H. C. Weber & Co., hardware..	16 65	
	641	E. W. Leech, lumber.....	1 87	
	642	Thomas Kennedy, teaming.....	7 00	
	643	A. Harvey & Son, steam fittings	2 54	
	644	Higgins & Taepke, paints.....	25 67	
	645	H. Heames & Sons, sand and lime.....	27 45	
	646	Faulconer & Emery, flag pole..	2 10	
	647	H. D. Edwards & Co., rubber...	7 20	
	648	J. C. Edmunds, livery.....	8 00	
	649	Detroit Paper Co., paper bags..	1 50	
	650	Detroit City Glass Works, glass	3 10	
	651	Detroit Linseed Oil Co., oil....	34 65	
	652	Dickinson & Hood, hardware...	17 79	
	653	W. A. Bourke, tar.....	10 30	
	954	Boydell Bros., paints.....	2 75	
	655	W. H. Anderson & Son, blacksmithing.....	4 65	507 67
May	659	W. H. Anderson & Son, blacksmithing.....	3 25	
	660	John Deppert, teaming.....	22 55	
	691	George Uridge, teaming.....	13 11	
	662	H. Heames & Sons, sand and lime.....	44 20	
	663	Webster & Meathe, steam fittings.....	6 32	
	665	W. H. Anderson & Son, blacksmithing.....	32 72	
	667	John Deppert, teaming.....	46 61	
	668	H. D. Edwards & Co., halyards.	1 63	
	669	Higgins & Taepke, paint.....	55 65	
	670	H. Heames & Sons, sand and lime.....	31 25	
	671	A. Harvey & Son, steam fittings	5 15	
	672	George Uridge, teaming.....	13 22	
	673	H. C. Weber & Co., hardware..	14 22	
	674	Webster & Meathe, steam fittings.....	5 06 $	294 94

June	677	John Deppert, teaming	$ 34 95		
	678	P. Dingemans, lumber	159 15		
	679	J. Kent & Son, livery	3 00		
	680	Higgins & Taepke, paint	43 96		
	682	Roehm & Davidson, corduroy	20 00		
	683	Geo. J. Sexauer, tin work	8 57		
	684	F. Tregaskus, teaming	18 27		
	685	George Uridge, teaming	19 45		
	686	H. C. Weber & Co., hardware	1 85		
	687	Webster & Meathe, steam fittings	112 41		
	688	Dickinson & Hood, hardware	107 00		
	689	H. D. Edwards & Co., twine	2 25		
	690	F. Hyns & Co., brick	236 50		
	691	H. Heames & Sons, sand and lime	57 25		
	692	W. H. Anderson & Sons, blacksmithing	3 60		
	693	Jas. C. Cobb, cut stone	111 23		
	694	J. Doody, teaming	10 00		
	696	Geo. Hanley, plastering	57 55		
	697	Adamant Wall Plaster, adamant	8 40		
	698	P. Dingemans, lumber	95 91		
	699	J. Doody, teaming	12 05		
	700	J. Deppert, teaming	22 55		
	701	J. W. Whiting, blacksmithing	10 35	$ 1,156 25	
				$ 16,469 82	

Labor.

July	340	Workmen's pay-roll, repairing	$ 1,561 90		
	359	" " "	2,133 75	$ 3,695 65	
Aug.	375	Workmen's pay-roll, repairing	2,221 06		
	378	" " "	52 00		
	379	" " "	1,158 22		
	380	" " "	909 74		
	402	" " "	847 73	5,188 75	
Sept.	403	Workmen's pay-roll, repairing	738 06		
	428	" " "	350 48		
	429	" " "	315 13		
	440	" " "	468 93	1,872 60	

Oct.	443	Workmen's pay-roll, repairing.	$ 406 85		
	444	" " "	379 14		
	460	" " "	351 28		
	475	" " "	334 54	$ 1,471	81
Nov.	476	Workmen's pay-roll, repairing.	253 80		
	477	" " "	214 14		
	478	" " "	141 35		
	502	" " "	248 21		
	503	" " "	154 88	1,012	38
Dec.	514	Workmen's pay-roll, repairing.	179 86		
	529	" " "	256 01		
	530	" " "	234 88		
	532	" " "	190 17	860	92
Jan.	533	Workmen's pay-roll, repairing.	250 29		
	535	" " "	353 09		
	549	" " "	279 68		
	562	" " "	257 11		
	563	" " "	174 20	1,314	37
Feb'y.	564	Workmen's pay-roll, repairing.	151 81		
	584	" " "	202 82		
	585	" " "	235 84		
	595	" " "	301 90	892	37
Mar.	596	Workmen's pay-roll, repairing.	222 67		
	605	" " "	247 72		
	610	" " "	214 45		
	623	" " "	191 01	875	85
Apr.	624	Workmen's pay-roll, repairing..	242 44		
	636	" " "	213 03		
	637	" " "	191 85		
	656	" " "	238 75	886	07
May	657	Workmen's pay-roll, repairing..	277 22		
	653	" " "	291 39		
	664	" " "	310 67		
	666	" " "	383 68		
	675	" " "	395 65	1,658	61
June	676	Workmen's pay-roll, repairing.	290 87		
	681	" " "	402 40		
	695	" " "	371 22		
	702	" " "	418 22	1,482	71
				$ 21,212	09

SALARY FUND.

July	71	W. E. Robinson, July salary....	$ 333 33	
	72	Jno. R. King, " "	208 33	
	73	Robert Wallace, " "	166 66	
	74	Janitor's pay-roll, " "	1,935 00	$ 2,643 32
Aug.	75	Janitor's pay-roll, August salary	1,935 00	
	76	W. E. Robinson, " "	333 33	
	77	John R. King, " "	208 33	
	78	Robert Wallace, " "	166 66	2,643 32
Sept.	79	Teachers' pay-roll, September salaries...	28,702 50	
	80	Janitors' pay-roll, September salaries.....	1,935 00	
	81	Robert Wallace, September salary.....	166 66	
	82	Jno. R. King, September salary.	208 33	
	83	W. E. Robinson, September salary.....	333 33	
	84	W. E. Baubie, August and September salaries.....	100 00	31,445 82
Oct.	85	W. E. Robinson, October salary	333 33	
	86	Jno. R. King, " "	208 33	
	87	R. Wallace, " "	166 66	
	88	W. E. Baubie, " "	50 00	
	89	Janitors' pay-roll, October salaries.....	2,074 00	2,832 32
Nov.	90	Teachers' pay-roll, October salaries.....	29,940 00	
	91	William Hay, substitute janitor	55 00	
	92	Janitors' pay-roll, November salary.....	2,235 00	
	93	W. E. Robinson, November salary.....	333 33	
	94	Jno. R. King, November salary	208 33	
	95	Robert Wallace, November salary.....	166 66	
	96	W. E. Baubie, November salary	50 00	32,988 32
Dec.	97	Teachers' pay-roll, November salaries.....	30,779 50	

Dec.	98	Teachers' pay-roll, December salaries	$30,572 75		
	99	Janitors' pay-roll, December salaries	2,278 00		
	100	W. E. Robinson, December salary	333 33		
	101	John R. King, December salary	208 33		
	102	Robert Wallace	166 66		
	103	W. E. Baubie	50 00	$64,388	57
Jan.	104	Janitors, pay-roll, January salaries	2,374 00		
	105	W. E. Robinson, January salary	333 33		
	106	John R. King, "	208 33		
	107	Robert Wallace, "	166 66		
	108	W. E. Baubie, "	50 00		
	109	Teachers' pay-roll, "	30,567 00	33,699	32
Feb.	110	Wm. Emblin, substitute janitor	25 00		
	111	Janitors' pay-roll, February salaries	2,581 00		
	112	W. E. Robinson, February salary	333 33		
	113	John R. King, February salary	208 33		
	114	Robert Wallace, February salary	166 66		
	115	W. E. Baubie, February salary.	50 00		
	116	Teachers' pay-roll, February salaries	31,832 25	35,176	57
Mar.	118	Janitors' pay-roll, March salaries	2,531 00		
	119	Teachers' " " "	30,707 25		
	120	W. E. Robinson, March salary.	333 33		
	121	John R. King, " " .	208 33		
	122	Robert Wallace, " " .	166 66		
	123	W. E. Baubie, " " .	50 00		
	124	W. F. Rollbuehler, extra help..	13 50	31,510	07
Apr.	125	Janitor's pay-roll, April salary...	2,376 00		
	126	W. E. Robinson, " ..	333 33		
	127	John R. King, " ..	208 33		
	128	R. Wallace, " ..	166 66		
	129	W. E. Baubie, " ..	50 00	3,134	32

May	130	Teacher's pay-roll, April salaries	$30,137 37	
	131	Janitors' pay-roll, May salaries..	2,267 00	
	132	W. E. Robinson, May salary	333 33	
	133	John R. King, "	208 33	
	134	R. Wallace, "	166 66	
	135	W. E. Baubie, "	50 00	
	136	Teachers' pay-roll, "	30,086 75	$33,149 54
June	137	Teachers' pay-roll, June salaries	30,006 50	
	138	W. E. Robinson, "	333 37	
	139	John R. King, "	208 37	
	140	R. Wallace, "	166 74	
	141	W. E. Baubie, "	83 33	
	142	Janitors' pay-roll, June salaries.	2,259 50	33,053 81
		Total amount expended.....		$339,289 20

EXPENDITURES BY SCHOOLS.

BAGLEY SCHOOL.

MRS. MARGARET E. MONAGHAN, PRINCIPAL.

Cor. Fourteenth and Pine Streets.

Teachers	$ 4,022 50	
Janitors	390 00	
Coal	200 00	
Taxes	89 30	
Repairs	84 24	
Water tax	12 00	
Gaskets	4 31	
Weighing coal	4 00	
Tin work	2 75	
Paint	40	
Fittings	20	
		$ 4,809 70

BARSTOW SCHOOL.

MISS CAROLINE CROSMAN, PRINCIPAL.

Larned, near Riopelle Street.

Teachers	$ 9,962 50	
Janitor	690 00	
Coal	319 20	
Repairs	251 60	
Wood	35 11	
Water tax	25 00	
Purifier	21 60	
Lumber	12 58	
Kindling	9 96	
Hardware	7 22	
Wood piling	5 67	
Weighing coal	5 65	
Paint	5 40	

Repairing clock	$ 4 05	
Framing	3 50	
Sawing wood	3 20	
Grate	3 10	
Books	1 02	
Tuning piano	2 00	
		$11,368 36

BELLEFONTAINE SCHOOL.

MISS MAGGIE M. LENAHAN, PRINCIPAL.

Morrell Street, near Fort.

Teachers	$ 5,747 00	
Janitor	626 00	
Coal	205 40	
Repairs	147 24	
Water tax	20 00	
Kindling	11 82	
Teaming	11 66	
Weighing coal	7 90	
Lumber	10 36	
Livery	3 00	
Wood piling	2 00	
Hardware	1 60	
Repairing clock	45	
		$ 6,994 43

BELLEVUE SCHOOL.

MRS. ANNA DEVINE, PRINCIPAL.

Bellevue Avenue, near Champlain Street.

Teachers	$ 2,037 50	
Janitor	249 00	
Repairs	74 95	
Wood	38 67	
Lumber	30 15	
Taxes	10 55	
Water tax	6 00	
Repairing shades	4 46	
Sawing wood	2 80	
Castings	2 40	
Hardware	2 05	

Wood piling	$ 1 61	
Glass	74	
Express	38	
Teaming	19	
		$ 2,461 45

BISHOP SCHOOL.

MR. LEWIS G. GORTON, PRINCIPAL.

Winder Street, bet. Hastings and Rivard.

Teachers	$14,594 50	
Repairs	2,831 04	
Janitor	1,160 00	
Coal	534 00	
Tuition rebate	3 00	
Lumber	306 36	
Teaming	266 78	
Brick	269 50	
Sand	144 96	
Fittings	119 57	
Hardware	95 85	
Cut stone	77 80	
Wood	64 35	
Gas	62 71	
Water tax	45 00	
Clay	38 00	
Blacksmithing	36 55	
Boiler repairs	30 40	
Lime	27 45	
Drafting	22 80	
Repairing shades	16 56	
Kindling	16 18	
Weighing coal	13 00	
Cloth	12 66	
Tar	10 30	
Tin work	8 57	
Grate bars	7 80	
Wood piling	7 05	
Paint	6 62	
Sawing wood	5 10	
Tuition rebate	3 00	
Stationery	2 72	

Gaskets	$ 2 04	
Tuning piano	2 00	
Castings	2 00	
Leather	50	
Pegs	25	
		$20,843 97

BROWNSON SCHOOL.

MISS AUGUSTA D. SCHRADER, PRINCIPAL.

Maple Street, between Chene and Jos. Campau.

Teachers	$ 3,124 50	
Janitor	373 00	
Coal	161 20	
Repairs	113 39	
Taxes	50 19	
Water tax	20 00	
Wood	17 63	
Lumber	11 90	
Trees	11 70	
Wood-piling	6 01	
Weighing coal	6 00	
Kindling	4 98	
Hardware	2 25	
Sawing wood	1 23	
Seating	80	
Paint	29	
		$ 3,905 07

CAMPBELL SCHOOL.

MISS ALBINA ALDRIDGE, PRINCIPAL,

Cor. St. Aubin and Alexandrine Avenues.

Teachers	$3,375 00	
Janitor	362 00	
Wood	169 85	
Repairs	152 51	
Lumber	80 96	
Wood piling	18 81	
Labor	14 48	
Repairing shades	12 73	
Sawing wood	12 25	

Water tax	$ 12 00	
Hardware	8 95	
Kindling	6 96	
Paint	36	
		$ 4,226 86

CASS SCHOOL.

MR. SAMUEL WHITNEY, PRINCIPAL.

Corner Grand River and Second Avenues.

Teachers	$15,357 50	
Janitor	1,080 00	
Repairs	441 60	
Coal	353 00	
Lumber	150 07	
Repairing boiler	70 35	
Tin work	66 44	
Water tax	35 00	
Plastering	24 82	
Draftsman	23 20	
Wood	21 66	
Brick	21 25	
Ventilators	13 20	
Grate bars	12 03	
Repairing shades	10 56	
Weighing coal	8 50	
Lawn mower	7 22	
Hardware	7 15	
Fittings	6 72	
Plumbing	5 00	
Wood piling	4 75	
Kindling	3 73	
Castings	3 33	
Paint	3 01	
Rubber	2 81	
Sawing wood	1 80	
Pulleys	1 08	
Blacksmithing	36	
		$17,736 14

CHANEY SCHOOL.

MISS MARION LAW, PRINCIPAL.

Sullivan Avenue, near Linden Street.

Teachers	$ 3,212 50	
Janitor	390 00	
Coal	124 80	
Repairs	123 20	
Water tax	18 00	
Taxes	16 01	
Wood	13 61	
Lumber	8 84	
Kindling	8 09	
Weighing coal	4 80	
Fittings	4 06	
Teaming	3 50	
Hardware	2 99	
Wood-piling	1 61	
Sawing wood	1 20	
		$ 3,933 21

CLAY SCHOOL.

MISS ABIGAIL A. MICHAELS, PRINCIPAL.

Pitcher Street, near Cass Avenue.

Teachers	$ 4,987 50	
Janitor	540 00	
Repairs	145 59	
Coal	137 80	
Teaming	85 94	
Water tax	25 00	
Wood	15 47	
Hardware	8 43	
Weighing coal	5 30	
Kindling	4 98	
Sand	4 20	
Fittings	3 90	
Wood piling	2 75	
Paint	2 42	
Sawing wood	1 13	
Lumber	86	
		$ 5,971 27

CLINTON SCHOOL.

MR. WALES C. MARTINDALE, PRINCIPAL.

Clinton Avenue, near Rivard Street.

Teachers	$ 5,050 00	
Janitor	590 25	
Repairs	398 00	
Plastering	178 93	
Coal	152 80	
Lumber	123 67	
Wood	20 42	
Water tax	16 00	
Blacksmithing	10 67	
Teaming	8 16	
Kindling	8 09	
Piling wood	6 36	
Hardware	5 07	
Repairing shades	4 50	
Weighing coal	4 10	
Paint	3 02	
Sand	1 73	
Sawing wood	1 60	
Fittings	1 32	
Gaskets	24	
		$ 6,584 93

CRAFT SCHOOL.

MISS SARAH M. HOWARD, PRINCIPAL.

Vinewood Avenue and Ash Street.

Teachers	$ 2,143 00	
Janitor	304 00	
Repairs	162 63	
Coal	30 00	
Purifier	20 70	
Wood	18 56	
Lumber	12 17	
Hardware	10 97	
Kindling	9 37	
Fittings	8 25	
Water tax	8 00	
Plumbing	3 99	

Wood piling	$ 1 61	
Sawing wood	1 60	
Weighing coal	60	
		$ 2,735 45

CUSTER SCHOOL.

MISS MARY E. MARKEY, PRINCIPAL.

Hammond near Ranspach Street.

Teachers	$ 1,200 00
Janitor	180 00
Repairs	77 43
Coal	60 00
Wood	14 85
Taxes	11 80
Water tax	8 00
Hardware	6 10
Sawing wood	1 20
Weighing coal	1 20
Wood piling	1 00
Stove repairs	60
	$ 1,562 18

DICKINSON SCHOOL.

MISS ELVIRA E. EDENS, PRINCIPAL.

Twelfth and Brigham Streets.

Mason work	$ 4,978 00
Lots	3,300 00
Carpenter work	2,841 22
Heating and ventilation	1,897 50
Plastering	980 00
Cut stone	926 25
Galvanized iron and tin and slate roofing	666 72
Painting and glazing	203 15
Taxes	191 67
Repairs	157 72
Labor	117 06
Paving	113 76
Iron and wire work	53 18
Abstract	34 40
Draftsman	34 40
Trees	12 60

Surveying	$ 8 00	
Bill posting	6 50	
Blacksmithing	4 50	
Lumber	4 14	
Teaming	3 50	
Flag pole	2 10	
Recording deed	1 00	
		$16,537 07

DUFFIELD SCHOOL.

MR. WM. A. ELLIS, PRINCIPAL.

Clinton Avenue, near Chene Street.

Teachers	$10,937 50	
Janitor	800 00	
Repairs	479 27	
Coal	316 80	
Water tax	32 00	
Teaming	27 49	
Shade repairing	18 40	
Hardware	14 24	
Lumber	12 00	
Weighing coal	6 60	
Paint	3 48	
Tin work	3 10	
Sawing wood	1 40	
Drafting	80	
Seating	67	
Wood piling	25	
		$12,654 00

EVERETT SCHOOL.

LOUISE E. ROHNERT, PRINCIPAL.

Fort Street near Hastings.

Teachers	$ 8,097 50	
Janitors	690 00	
Coal	249 00	
Repairs	97 56	
Piano	75 00	
Water tax	25 00	
Wood	20 42	
Repairing shades	13 13	

Kindling	$ 11 50	
Weighing coal	9 30	
Plastering	8 05	
Wood piling	4 69	
Paint	3 58	
Sawing wood	1 50	
Hardware	80	
Fittings	22	
		$ 9,307 25

FARRAND SCHOOL.

MISS MILLIE H. DOLE, PRINCIPAL.

Harper Avenue and John R. Street.

Teachers	$ 3,705 00	
Janitor	492 00	
Coal	283 40	
Repairs	101 68	
Purifier	19 80	
Wood	21 60	
Water tax	12 00	
Kindling	8 09	
Wood piling	6 84	
Weighing coal	6 40	
Lumber	3 89	
Hardware	2 90	
Blacksmithing	2 00	
Paint	1 61	
Sawing wood	1 50	
Gaskets	60	
Castings	38	
Amonia	25	
Teaming	19	
Rubber	12	
Fittings	02	
		$ 4,670 27

FERRY SCHOOL.

MISS H. ADELINE DUNCAN, PRINCIPAL.

Ferry and Jos. Campau Avenues.

Carpenter work	$ 3,018 00	
Mason work	3,000 00	
Teachers	2,312 00	

Plastering and concrete work	$ 824 00	
Cut stone	524 50	
Heating and ventilating	1,227 00	
Labor	484 73	
Janitor	304 00	
Painting and glazing	308 30	
Repairs	207 67	
Galvanized iron, tinning and slate roofing	140 00	
Coal	130 00	
Assessment	97 44	
Blacksmithing	54 44	
Iron work	69 00	
Insurance	52 30	
Fittings	40 82	
Draftsman	32 40	
Wood	29 70	
Hardware	13 60	
Water tax	8 00	
Wood piling	7 03	
Kindling	7 47	
Repairing shades	5 34	
Weighing coal	2 60	
Sawing wood	2 40	
Seating	2 22	
Connection	2 00	
Lumber	3 99	
Tin work	90	
Express	37	
Paint	36	
		$12,912 58

FIRNANE SCHOOL.

MISS EMMA R. GRAY, PRINCIPAL.

Fort Street, near McDougall Avenue.

Teachers	$ 3,350 00	
Janitor	492 00	
Coal	264 20	
Repairs	79 93	
Water tax	12 00	
Labor	10 50	
Repairing shades	10 36	

Weighing coal	6 00	
Kindling	5 45	
Copperas	3 08	
Hardware	2 15	
Fittings	1 65	
Repairing clock	90	
		$ 4,238 22

FRANKLIN SCHOOL.

MISS ISABEL H. MACKAY, PRINCIPAL.

Seventh Street near Locust.

Teachers	$ 3,262 50	
Repairs	459 86	
Janitor	390 00	
Lumber	332 65	
Coal	168 00	
Paint	49 53	
Hardware	30 72	
Wood	14 85	
Water tax	12 00	
Sand	7 98	
Kindling	7 47	
Weighing coal	3 50	
Wood piling	2 33	
Seating	1 89	
Sawing wood	1 60	
		$ 4,744 88

GARFIELD SCHOOL.

MISS ELLA A. THOMPSON, PRINCIPAL.

Rivard Street, near Frederick.

Teachers	$ 2,185 00	
Janitor	304 00	
Wood	111 99	
Repairs	50 29	
Wood piling	13 41	
Water tax	10 00	
Sawing wood	7 70	
Kindling	4 98	
Repairing shades	2 50	

Hardware	$ 2 20	
Paint	35	
		$ 2,692 42

GRATIOT SCHOOL.

MISS SARAH J. RUEHLE, PRINCIPAL.

Gratiot and Bellevue Avenues.

Teachers	$ 943 50	
Janitor	150 00	
Repairs	114 81	
Wood	33 75	
Water tax	5 00	
Wood piling	2 81	
Kindling	2 49	
Sawing wood	1 75	
Lumber	1 19	
Express	63	
Glass	52	
Tin work	35	
Hardware	20	
		$ 1,257 00

HANCOCK SCHOOL.

MISS INE M. WELSH, PRINCIPAL.

Hancock and Fourteenth Avenues.

Teachers	$ 2,400 50	
Janitor	304 00	
Coal	103 99	
Repairs	83 31	
Trees	52 50	
Wood	14 85	
Water tax	8 00	
Kindling	4 98	
Weighing coal	3 20	
Wood piling	2 42	
Lumber	1 50	
Sawing wood	1 13	
		$ 2,980 08

HICKEY SCHOOL.

MISS CLARA E. COGGER, PRINCIPAL.

Eighteenth and McGraw Streets.

Teachers	$ 1,275 00	
Janitor	304 00	
Coal	60 00	
Repairs	54 26	
Water tax	8 00	
Teaming	3 50	
Taxes	2 18	
Weighing coal	1 20	
Fittings	35	
Hardware	30	
		$ 1,708 79

HIGH SCHOOL.

MR. FREDERICK L. BLISS, PRINCIPAL.

Griswold and State Streets.

Teachers	$30,386 00	
Repairs	7,531 28	
Janitor	1,350 00	
Steam fittings	1,141 44	
Lumber	1,119 99	
Plastering	798 29	
Coal	604 02	
Seats	539 37	
Cement floors	537 03	
Brick	518 25	
Sand	503 08	
Gas	473 99	
Tin work	328 63	
Flooring	338 70	
Chemicals	300 94	
Seating, labor	279 41	
Hardware	223 54	
Teaming	215 37	
Blacksmithing	181 24	
Books	174 00	
Paint	153 37	
Printing	131 50	

Lime	$	113 92
Microscopes		93 99
Glass		87 99
Plumbing		87 99
Desks		76 00
Carpet		72 93
Cut stone		51 72
Rods		35 56
Skeleton		35 00
Rent of Y. M. C. A. hall		30 00
Diplomas		27 28
Drugs		26 91
Water tax		25 00
Flowers		25 00
Flag		24 00
Disinfectants		20 70
Relaying pavement		20 13
Book-binding		18 20
Wire guards		17 88
Castings		15 92
Wood		14 85
Repairing boiler		14 63
Towels		13 52
Laundering		12 00
Stationery		11 90
Baskets		10 25
Ice		10 00
Loan jack screws		10 00
Kindling		9 96
Jars		8 50
Cement		8 00
Forceps		7 50
Supplies		7 38
Sundries		7 35
Roofing		7 00
Repairing shades		6 41
Draftsman		6 40
Express		6 25
Freight		6 14
Chair tips		5 40
University expenses		5 20

Music	$ 5 00	
Gaskets	4 84	
Paper	4 80	
Sawing wood	3 86	
Soap	3 65	
Wire	3 65	
Rubber	3 55	
Clay	3 25	
Chair bottoms	3 01	
Tapers	3 00	
Halyards	2 76	
Supplies	2 28	
Painting	2 40	
Sewer connection	2 25	
Tuning piano	2 00	
Weighing coal	1 50	
Chamois	1 50	
Charcoal	1 50	
Wood piling	1 28	
Paste	1 25	
Water sleeve	1 11	
Seeds	1 08	
Sawdust	1 00	
Pulleys	60	
Fitting key	50	
Tubing	32	
Ribbon	18	
Copperas	15	
		$48,986 50

HOUGHTON SCHOOL.

MISS ANNIE M. JOYCE, PRINCIPAL.

Sixth and Abbott Streets.

Teachers	$ 8,197 50	
Janitor	757 00	
Paving	251 32	
Coal	244 00	
Repairs	128 81	
Water tax	25 00	
Ventilation	20 00	
Wood	14 85	

Kindling	$ 9 37	
Plastering	7 75	
Weighing coal	6 00	
Wood piling	5 25	
Paints	1 54	
Blacksmithing	1 65	
Repairing clocks	1 75	
Fittings	1 39	
Sawing wood	1 13	
Hardware	80	
Tin work	25	
		$ 9,675 36

HUBBARD SCHOOL.

MISS HARRIET C. PARK, PRINCIPAL.

Twenty-fifth and Labrosse Streets.

Teachers	$ 4,442 50	
Janitor	418 00	
Coal	148 20	
Repairs	84 57	
Wood	14 23	
Water tax	12 00	
Kindling	9 37	
Weighing coal	5 70	
Wood piling	4 75	
Teaming	1 93	
Tin work	1 75	
Fittings	1 50	
Sawing wood	1 13	
Oil	60	
Hardware	25	
		$ 5,146 48

IRVING SCHOOL.

MISS ROENNA HOLBROOK, PRINCIPAL.

Willis Avenue near Woodward.

Teachers	$10,263 75	
Janitor	730 00	
Coal	385 20	
Repairs	162 14	
Water tax	25 00	

Wood	$ 14 85	
Kindling	10 73	
Weighing coal	8 90	
Blacksmithing	5 44	
Fitting	4 13	
Lumber	3 71	
Repairing shades	3 66	
Hardware	2 65	
Castings	2 20	
Paint	1 90	
Wood piling	1 60	
Seating	1 55	
Boiler repairs	1 25	
Sawing wood	1 20	
Livery	75	
Teaming	19	
		$ 11,630 80

JACKSON SCHOOL.

MISS MARY L. REDMOND, PRINCIPAL.

Larned Street, near Dubios.

Teachers	$ 4,162 50	
Janitor	390 00	
Wood	159 63	
Repairs	97 13	
Draftsman	74 80	
Wood piling	16 77	
Water tax	12 00	
Sawing wood	10 50	
Kindling	7 18	
Hardware	1 75	
Tin work	1 40	
Paint	1 39	
Lumber	30	
		$ 4,935 35

JEFFERSON SCHOOL.

MR. FRED W. MOE, PRINCIPAL.

Seldon Avenue and Crawford Street.

Teachers	$ 11,414 62	
Janitor	800 00	
Coal	446 40	

Repairs	$ 260 09	
Repairing shades	25 60	
Water tax	25 00	
Lumber	24 37	
Wood	19 80	
Teaming	15 55	
Kindling	10 77	
Weighing coal	9 30	
Wood piling	5 80	
Hardware	5 76	
Paint	3 92	
Blacksmithing	2 24	
Nigrosene	2 02	
Sawing wood	1 60	
Seating	51	
		$ 13,073 35

JOHNSTON SCHOOL.

MISS LIZZIE C. RICHARDSON, PRINCIPAL.

Waterloo Street near Dubois.

Teachers	$ 2,287 50	
Janitor	304 00	
Repairs	70 55	
Coal	60 00	
Wood	10 52	
Repairing shades	9 27	
Water tax	8 00	
Wood piling	2 45	
Nigrosene	2 00	
Teaming	1 55	
Sawing wood	1 50	
Weighing coal	1 20	
Blacksmithing	1 00	
Fittings	82	
		$ 2,760 36

LINCOLN SCHOOL.

MISS MARGARET A. KING, PRINCIPAL.

Kentucky and Antoine Streets.

Teachers	$ 4,457 50	
Janitor	570 00	
Coal	267 25	

Repairs	$ 122 33	
Water tax	25 00	
Wood	14 85	
Repairing shades	12 02	
Kindling	7 47	
Weighing coal	6 30	
Lumber	6 00	
Plumbing	5 70	
Plastering	4 93	
Fittings	4 67	
Wood piling	3 92	
Hardware	1 95	
Gaskets	1 91	
Paint	1 57	
Sawing wood	1 13	
		$ 5,514 50

LIVERNOIS SCHOOL.

MISS EFFIE M. PROCTOR, PRINCIPAL.

Livernois Avenue near Michigan.

Teachers	$ 1,175 00	
Janitor	180 00	
Repairs	89 39	
Lumber	41 55	
Repairing shades	7 48	
Water tax	5 00	
Wood piling	3 25	
Hardware	2 50	
Kindling	2 49	
Seating	1 55	
		$ 1,508 21

McKINSTRY SCHOOL.

MISS KATE MONAGHAN, PRINCIPAL.

McKinstry and McMillan Avenues.

Carpenter work	$ 3,010 05	
Teachers	1,641 00	
Mason work	1,245 00	
Plastering and concreting	660 00	
Painting and slating work	485 50	
Seats	369 98	

Janitor	$ 319 00	
Labor	295 33	
Galvanized iron and tin work	152 25	
Cut stone work	128 00	
Coal	120 00	
Repairs	111 53	
Draftsman	57 40	
Iron and wire work	57 40	
New building, labor	52 50	
Wood	47 03	
Curtains	28 80	
Plumbing	25 21	
Fittings	15 53	
Kindling	9 96	
Water tax	8 00	
Hardware	5 44	
Sawing wood	3 76	
Repairing shades	3 08	
Wood piling	2 42	
Weighing coal	2 40	
Tin work	1 80	
Lumber	1 36	
Blacksmithing	90	
Freight	25	
		$ 8,860 88

MIAMI AVENUE SCHOOL.

MR. M. J. WHITNEY, PRINCIPAL.

Miami Avenue, near Gratiot.

Mason work	$ 7,296 75	
Carpenter work	6,578 60	
Heating and ventilating	4,433 50	
Cut stone	2,376 03	
Galvanized iron, tin and slate roofing	1,096 00	
Teachers	1,095 00	
Plastering and concreting	1,004 70	
Labor	693 49	
Painting and glazing	514 25	
Seating	492 89	
Plumbing	404 00	
Wire and iron work	314 75	

Janitor	$ 332 50
Insurance	155 00
Coal	145 50
Lumber	76 29
Blacksmithing	43 97
Repairs	55 09
Matting	38 99
Hardware	36 97
Taxes	29 56
Draftsman	28 80
Flag	27 00
Furniture	23 50
Teaming	10 11
Weighing coal	5 60
Kindling	4 96
Towels	5 40
Dusters	4 97
Tile	3 60
Looking glass	2 75
Wax tapers	2 25
Fittings	2 06
	$27,334 83

NEWBERRY SCHOOL.

MR. BENJAMIN A. NOLAN, PRINCIPAL.

Twenty-ninth Street, near Visgar.

Teachers	$ 3,283 75
Mason work	2,898 19
Carpenter work	1,896 35
Seating	700 00
Cut stone	395 30
Janitor	390 00
Repairs	236 92
Labor	217 87
Coal	165 00
Galvanized iron, tinning and slate roofing	136 56
Painting and glazing	67 83
Draftsman	47 20
Emptying vault	40 00
Street opening assessment	29 00
Iron rods	23 50

Wood	$ 19 80	
Lumber	12 95	
Hardware	12 83	
Water tax	12 00	
Taxes	12 00	
Repairing shades	6 10	
Abstracts	4 50	
Plumbing	4 00	
Piano cover	4 00	
Oil	3 50	
Weighing coal	3 30	
Wood piling	2 00	
Sawing wood	1 60	
Sponge	50	
		$10,626 55

NICHOLS SCHOOL.

MISS ELIZA S. FOOTE, PRINCIPAL.

Elm Street, near Seventh.

Teachers	$ 4,332 50	
Repairs	409 49	
Janitor	390 00	
Coal	96 33	
Hardware	30 72	
Paint	22 00	
Brick	16 50	
Wood	14 85	
Water tax	12 00	
Sand	7 10	
Kindling	5 20	
Weighing coal	3 70	
Teaming	3 50	
Lumber	3 13	
Wood piling	2 87	
Plastering	2 00	
Fittings	1 90	
Hauling wood	1 05	
		$ 5,354 82

NORVELL SCHOOL.

MISS MARTHA BALDWIN, PRINCIPAL.

Arndt Street near Jos. Campau Ave.

Teachers	$ 7,640 00	
Repairs	753 46	
Janitor	730 00	
Coal	311 00	
Paint	130 99	
Water tax	24 00	
Lumber	21 30	
Wood	17 33	
Fittings	17 02	
Weighing coal	7 90	
Kindling	7 47	
Hardware	3 60	
Repairing shades	3 60	
Sawing wood	2 25	
Blacksmithing	1 20	
		$ 9,671 12

JOHN OWEN SCHOOL.

MISS KATE E. LENAGHAN, PRINCIPAL.

Myrtle and Thirteenth Streets.

Teachers	$ 4,791 00	
Janitor	595 00	
Repairs	182 76	
Coal	171 40	
Water tax	16 00	
Fittings	14 67	
Weighing coal	3 80	
Kindling	8 09	
Nigrosene	2 00	
Hardware	88	
Wood-piling	77	
Teaming	77	
Gaskets	72	
Blacksmithing	48	
		$ 5,788 34

PITCHER SCHOOL.

MISS ISABELL F. THIRKELL, PRINCIPAL.

Sullivan Ave., near Butternut Street.

Teachers	$ 7,580	25
Janitor	730	00
Coal	272	40
Repairs	180	38
Water tax	24	00
Disinfectants	21	60
Wood	19	80
Paint	11	40
Carpet	7	23
Fittings	6	81
Weighing coal	6	50
Kindling	4	98
Wood piling	4	44
Tuning piano	2	00
Sawing wood	1	40
Castings	1	00
Oil	1	00
Gaskets		72
Hardware		15
	$ 8,876	06

POTTER SCHOOL.

MISS MAUD A. BURROWS, PRINCIPAL.

Tillman Avenue, near Myrtle Street.

Mason work	$ 4,488	50
Carpenter work	4,147	86
Heating and ventilating	2,423	85
Plastering and concrete work	2,251	60
Lots	2,200	00
Teachers	1,172	50
Cut stone	1,004	25
Seating	759	34
Labor	669	79
Painting and glazing	563	00
Plumbing	203	00
Lumber	198	06
Janitor	177	58

Wire and iron work	$ 148 04	
Coal	126 96	
Curtains	110 21	
Galvanized iron, tin and slate roofing	92 70	
Bell	86 00	
Insurance	68 26	
Teaming	55 57	
Repairs	47 06	
Draftsman	42 20	
Blacksmithing	26 77	
Hardware	23 59	
Surveying	22 00	
Matting	19 02	
Kindling	4 96	
Weighing coal	4 85	
Recording deed	1 25	
Pail	1 25	
Crank	50	
Fittings	35	
		$21,140 87

RUSSELL SCHOOL.

MR. NETTIE MITCHELL, PRINCIPAL.

Russell Street, near Elliot.

Teachers	$ 3,660 00	
Janitor	540 00	
Coal	208 00	
Repairs	201 95	
Trees	67 50	
Lumber	36 64	
Water tax	16 00	
Wood	14 85	
Seating	11 25	
Weighing coal	8 00	
Kindling	7 47	
Hardware	1 95	
Wood piling	1 86	
Sawing wood	1 80	
		$ 4,777 27

TAPPAN SCHOOL.

MISS HELEN W. McKERROW, PRINCIPAL.

Thirteenth and Marantette Streets.

Teachers	$10,745 00	
Janitor	910 00	
Repairs	489 22	
Coal	381 88	
Water tax	35 00	
Lumber	23 78	
Brick	22 50	
Fittings	20 72	
Fire clay	20 50	
Sand	16 55	
Carpet	14 67	
Kindling	13 69	
Paint	12 68	
Repairing shades	11 69	
Labor	10 50	
Teaming	9 75	
Weighing coal	8 60	
Plastering	8 25	
Cut stone	6 31	
Blacksmithing	3 95	
Wood piling	3 36	
Disinfectant	2 25	
Tuning piano	2 00	
Hardware	1 40	
Seed	1 20	
Castings	1 00	
Gaskets	96	
Tin work	75	
Seating	67	
		$12,778 83

TILDEN SCHOOL.

MISS ELLA M. SHEERAN, PRINCIPAL.

Kirby Avenue and Seventh Street.

Teachers	$ 7,730 00	
Fire accident	3,307 50	
Janitor	690 00	

Coal	$ 288 60	
Repairs	197 47	
Seating	106 03	
Lumber	30 75	
Seating	30 08	
Trees	29 70	
Water tax	25 00	
Desk	19 00	
Wood	17 32	
Weighing coal	11 10	
Kindling	10 61	
Hardware	10 58	
Plastering	9 25	
Mower	7 98	
Taxes	6 39	
Wood piling	2 41	
Sawing wood	1 40	
		$12,531 17

NORMAL TRAINING SCHOOL.

MISS MATILDA E. COFFIN, PRINCIPAL.

Miami Avenue, near Gratiot.

Teachers	$ 3,150 00	
Seating	285 30	
Desks	202 45	
Freight	7 55	
Curtains	2 15	
		$ 3,647 45

TROWBRIDGE SCHOOL.

MISS MARGARET A. KING, PRINCIPAL.

Forest Ave., near Antoine Street.

Carpenter work	$ 6,838 39	
Heating and ventilating	3,744 25	
Mason work	2,698 07	
Teachers	2,855 50	
Plastering	2,395 50	
Seats	1,583 24	
Galvanized iron, tinning and slate roofing	1,199 10	
Cut stone	990 00	

Painting and glazing	$ 973 93	
Labor	898 73	
Plumbing	310 00	
Janitor	300 00	
Coal	285 99	
Lumber	259 58	
Iron work	159 90	
Bell	157 20	
Insurance	120 84	
Repairs	109 31	
Sewer assessment	97 17	
Curtains	70 95	
Hardware	62 95	
Teaming	56 00	
Draftsman	38 00	
Blacksmithing	32 69	
Trees	28 80	
Desk	19 00	
Taxes	14 97	
Weighing coal	11 00	
Fittings	8 64	
Surveying	8 00	
Trucking	8 00	
Car tickets	6 00	
Seating	5 50	
Express	75	
Matting	70	
Crank	50	
Freight	25	
		$26,349 40

VAN DYKE SCHOOL.

MR. C. G. G. PAINE, PRINCIPAL.

Field Ave. and Agnes Street.

Teachers	$ 5,181 00	
Janitor	540 00	
Coal	221 00	
Repairs	143 98	
Lumber	22 12	
Seating	20 50	
Water tax	16 00	

Hardware	$ 15 06	
Wood	14 85	
Taxes	13 11	
Seating	8 25	
Kindling	8 09	
Weighing coal	8 00	
Wood piling	3 67	
Sand	2 63	
Oil	1 30	
Sawing wood	1 13	
Seed	1 00	
Paint	38	
Express	37	
Teaming	19	
		$ 6,222 63

WASHINGTON SCHOOL.

MR. CHARLES F. DANIELS, PRINCIPAL.

Beaubien and Harriett Streets.

Teachers	$9,512 50	
Janitor	690 00	
Coal	360 00	
Repairs	125 72	
Water tax	25 00	
Wood	24 75	
Repairing shades	16 20	
Kindling	8 09	
Weighing coal	7 50	
Wood piling	3 33	
Lumber	2 64	
Paint	2 08	
Draftsman	2 00	
Sawing wood	2 00	
Fittings	1 73	
Blacksmithing	25	
Repairing compass	25	
		$10,78 04

WEBSTER SCHOOL.

MR. CHAS. B. HALL, PRINCIPAL

Twenty-first and Howard Streets.

Teachers	$12,628 50	
Repairs	1,021 19	
Janitor	980 00	
Coal	534 00	
Lumber	478 55	
Teaming	127 05	
Seats	68 39	
Water tax	36 00	
Hardware	28 95	
Fire clay	23 00	
Weighing coal	18 00	
Fittings	15 55	
Sand	14 15	
Kindling	9 96	
Carpet	5 50	
Blacksmithing	2 50	
Wood piling	2 41	
Disinfectants	2 25	
Tuning piano	2 00	
Gaskets	1 97	
Tubing	1 13	
Crock	73	
Paint	35	
		$16,002 13

WILKINS SCHOOL.

MISS HARRIET A. MARSH, PRINCIPAL.

Porter and Second Streets.

Teachers	$ 8,987 50	
Janitor	690 00	
Coal	221 00	
Repairs	152 72	
Water tax	25 00	
Wood	18 56	
Weighing coal	8 00	
Plastering	7 75	
Repairing shades	5 28	

Wood piling	$ 5 19	
Kindling	4 98	
Carpet	4 82	
Paint	3 18	
Seating	1 55	
Sawing wood	1 50	
Steam fittings	85	
Cement	75	
Hardware	30	
		$10,138 93

SECRETARY'S OFFICE.

High School Building, Griswold and State Streets.

Telephone	$ 30 00	
Stationery	29 54	
Carpet	22 28	
Books	12 75	
Binding	12 10	
Map	12 00	
Compiling census	8 25	
Hardware	5 40	
Directory	5 00	
Repairing chair	1 40	
Ink	1 00	
Glass	1 00	
Paint	60	
Blacksmithing	60	
Spring	50	
Telegram	29	
		$ 142 71

SHOP ACCOUNT.

Elm Street near Grand River Avenue.

Paint	$ 1,384 25	
Repairs	859 08	
Lumber	488 16	
Repairing seats	287 00	
Hardware	230 37	
Labor	136 40	
Plumbing	121 98	

Cut stone	$ 102 32	
Flag pole and tackle	101 59	
Blacksmithing	91 02	
Seating	74 76	
Writing arms	52 50	
Fittings	48 92	
Brick	46 10	
Castings	35 39	
Oil	34 65	
Sand	26 50	
Stove cement	22 90	
Slating	21 70	
Hardware	27 80	
Tin work	14 95	
Cement	10 10	
Crock	6 80	
Stove repairs	6 58	
Surveying	6 00	
Sponges	5 84	
Water tax	5 00	
Glass	3 70	
Chair bottoms	3 56	
Soda	2 67	
Wood piling	2 25	
Rubber	2 25	
Acid	1 75	
Freight	25	
		$ 4,265 09

SPECIAL TEACHERS.

Teachers	$ 4,800 00	
		$4,800 00

STOVE ROOM.

High School Building, Griswold and State Streets.

Brushes	$ 493 79	
Repairs	228 23	
Hardware	199 10	
Matting	176 79	
Clocks	153 00	
Corduroy	129 86	

Hose	$ 129	75
Soap	104	20
Brooms	88	98
Chairs	76	00
Labor	60	28
Nigrosene	43	33
Oil	41	67
Footscrapers	36	00
Pails	31	75
Stationery	29	50
Tin work	25	70
Pointers	25	00
Ink wells	24	07
Ink stands	22	00
Cloth	20	57
Mop swabs	20	00
Freight	15	60
Nails	12	45
Mops	11	12
Soda	10	08
Lumber	10	00
Wicks	8	34
Paint	7	90
Rubber	7	89
Mop wringers	7	50
Sponges	6	75
Cord	6	10
Glass	5	85
Curtain fixtures	5	75
Mop sticks	4	85
Matches	4	00
Rattans	2	50
Paper sacks	2	25
Twine	1	50
Barrel	1	50
Pulleys	1	25
Blacksmithing	1	12
Stamps		40
		$ 2,294 27

SUPERINTENDENT'S OFFICE.

High School Building, Griswold and State Streets.

Clerk's salary	$ 1,075 00	
Telephone	30 00	
Directory	5 00	
Towels	1 20	
Hardware	60	
Twine	30	
Tape	30	
		$ 1,112 40

SUPERVISOR'S OFFICE.

Griswold and State Streets.

Stationery	58 25	
Telephone	30 00	
Car tickets	28 25	
Chair	2 75	
Hardware	1 10	
Paint	10	
		$ 120 45

UNGRADED SCHOOL.

MR. M. J. WHITNEY, PRINCIPAL.

Griswold Street, opposite High School.

Teachers	$ 2,555 00	
Rent	350 00	
Janitor	175 00	
Wood	47 03	
Repairs	20 06	
Disinfectants	1 15	
Lumber	26	
Fittings	02	
		$ 3,148 52

MISCELLANEOUS ACCOUNT.

Stationery	$ 2,026 74	
Printing	1,200 16	
Maps	1,047 17	
Books	1,016 20	
H. L. Reeves	630 00	

F. Wilson	$ 630 00	
Advertising	480 60	
Teaming	386 33	
Inventory	263 42	
Annual report	189 52	
Livery	144 00	
Car tickets	131 50	
Furniture	75 75	
B. Reilly	75 00	
Germicides	72 00	
Extra Clerks	59 75	
Repairs	50 65	
W. E. Baubie	50 00	
Envelopes.	48 50	
Jno. G. Hawley	40 00	
Paper	35 90	
Stamps	17 35	
Balance on trip to Lansing for attorney	14 00	
Ruling knives	12 00	
Rulers	12 00	
Blacksmithing	10 92	
Draftsman	10 40	
Attorney	10 00	
Tin pans	10 00	
Freight	9 11	
Supplies	8 07	
Toilet paper	6 50	
Express	5 75	
Witness fees	5 00	
Hardware	4 60	
Recording deeds	3 00	
Shoe pegs	3 00	
Postal cards	5 00	
Traveling expenses	2 75	
Telegraph	1 50	
Oil	1 28	
Telephone	75	
Fittings	20	
		$ 8,806 35

NORVELL NIGHT SCHOOL.

MR. C. G. G. PAINE, PRINCIPAL.

Arndt Street near Jos. Campau Ave.

Teachers	$ 2,241 50	
Books	444 26	
Janitor	200 00	
Lamps	136 55	
Oil	48 93	
Express	2 00	
Rubber stamp	1 05	
Hardware	35	
		$ 3,074 64

PITCHER NIGHT SCHOOL.

MR. BENJAMIN COMFORT, PRINCIPAL.

Sullivan Ave., near Butternut Street.

Teachers	$ 2,138 25	
Books	421 47	
Janitor	200 00	
Lamps	143 49	
Oil	58 06	
Express	5 25	
Rubber stamps	1 05	
		$ 2,967 57

DUFFIELD NIGHT SCHOOL.

MR. WILLIAM A. ELLIS, PRINCIPAL.

Clinton Avenue near Chene Street.

Teachers	$ 1,119 75	
Books	286 41	
Janitor	188 00	
Lamps	84 33	
Oil	34 82	
Chimneys	1 88	
Express	1 50	
Rubber stamp	1 05	
Hardware	52	
		$ 1,718 29

NEWBERRY NIGHT SCHOOL.

MR. BENJAMIN A. NOLAN, PRINCIPAL.

Twenty-ninth Street, near Visgar.

Teachers	$ 883 50	
Books	256 38	
Janitor	188 00	
Oil	27 94	
Lamps	11 25	
Rubber stamp	1 05	
Express	1 05	
Hardware	44	
		$ 1,369 61.
Grand total		$504,771 71

RECAPITULATION.

Name of School.	Amt. Expended.
Bagley	$ 4,809 70
Barstow	11,368 36
Bellefontaine	6,994 43
Bellevue	2,461 45
Bishop	20,843 97
Brownson	3,905 07
Campbell	4,226 86
Cass	17,736 14
Chaney	3,933 21
Clay	5,971 27
Clinton	6,584 93
Craft	2,735 45
Custer	1,562 18
Dickinson	16,537 07
Duffield	12,654 00
Everett	9,307 25
Farrand	4,670 27
Ferry	12,912 58
Firnane	4,238 22
Franklin	4,744 88
Garfield	2,692 42
Gratiot	1,257 00
Hancock	2,980 08
Hickey	1,708 79
High	48,986 50
Houghton	9,675 36
Hubbard	5,146 48
Irving	11,630 80
Jackson	4,935 35
Jefferson	13,073 35
Johnston	2,760 36
Lincoln	5,514 50
Livernois	1,508 21
McKinstry	8,860 88
Miami Avenue	27,334 83
Newberry	10,626 55
Nichols	5,354 82
Norvell	9,671 12
John Owen	5,788 34

Pitcher	$ 7,876 06	
Potter	21,140 87	
Russell	4,777 27	
Tappan	12,778 83	
Tilden	12,531 17	
Normal Training	3,647 45	
Trowbridge	26,349 40	
Van Dyke	6,222 63	
Washington	10,784 04	
Webster	16,002 13	
Wilkins	10,138 93	
Secretary's Office	142 71	
Shop Account	4,265 09	
Special Teachers	4,800 00	
Store Room	2,294 27	
Superintendent's Office	1,112 40	
Supervisor's Office	120 45	
Ungraded School	3,148 52	
Miscellaneous accounts	8,806 35	
Norvell Night School	3,074 64	
Pitcher Night School	2,967 57	
Duffield Night School	1,718 29	
Newberry Night School	1,369 61	$504,771 71
Grand total		$504,771 71

Respectfully,

JOHN R. KING,

Secretary.

SCHEDULE OF PUBLIC SCHOOL PROPERTY.

NAME OF SCHOOL.	No. of Rooms	Sittings.	Value of Lot.	Value of Building.	Total.
Bagley.	6	366	$2,100	$15,000	$17,100
Barstow.....	12	617	6,000	30,000	36,000
Bishop.....	21	1,237	10,000	56,000	66,000
Bellefontaine...	10	520	4,000	25,000	29,000
Bellevue.....	3	153	2,000	2,500	4,500
Bellevue (New)..	1	.....	1,500	1,500	3,000
Brownson.....	6	307	6,000	18,000	24,000
Campbell.....	6	306	3,000	6,000	9,000
Cass.....	20	1,020	57,000	45,000	102,000
Chaney.....	6	331	3,000	18,000	21,000
Clay.....	8	413	10,000	25,000	35,000
Clinton.....	8	455	3,500	18,000	21.500
Craft.....	4	243	3,500	5,000	8,500
Custer.....	2	125	1,000	3,000	4,000
Dickinson.....	8	Not Cmpltd	4,000	25,000	29,000
Duffield.....	16	850	8,000	40,000	48,000
Everett....	12	656	4,500	25,000	29,500
Farrand.....	6	315	5,000	18,000	23,000
Ferry.....	8	226	5,000	18,000	23,000
Firnane.....	6	363	3,000	12,000	15,000
Franklin.....	6	346	6,000	4,000	10,000
Garfield.....	4	207	6,000	4,000	10,000
Gratiot....	1	98	12,000	2,000	14,000
Hancock.....	4	234	6,000	12,000	18,000
Hickey.....	4	87	3,000	4,000	7,000
High....	27	900	120,000	100,000	220,000
Houghton.....	12	589	4,500	20,000	24,500
Hubbard	6	334	4,000	18,000	22,000
Irving	12	687	15,000	35,000	50,000
Jackson.	6	302	8,000	2,000	10,000
Jefferson.....	16	822	6,000	40,000	46,000
Johnston.....	4	222	2,000	10,000	12,000
Lincoln	8	449	6,000	24,000	30,000
Livernois Ave.....	2	99	2,500	2,000	4,500
McKin try.....	8	295	3,000	12,000	15,000
Miami Ave.	10	216	25,000	25,000	50,000
Newberry.....	12	322	4,000	30,000	34,000
Nichols.	6	323	3,000	10,000	13,000
Norvell.....	12	956	5,000	30,000	35,000
John Owen.....	8	449	6,000	18,000	24,000
Pitcher....	12	608	4,000	30,000	34,000
Potter.....	6	265	4,000	18,000	22,000
Roberts.....	8	Not Cmpltd	8,000	25,000	33,000
Russell.....	8	438	Leased	25,000	25.000
Tappan....	16	874	8,000	40,000	48,000
Tilden.....	12	647	6,000	30.000	36,000
Trowbridge.....	12	620	10,000	30,000	40,000
Van Dyke.....	8	424	7,500	25,000	32,500
Washington.....	12	631	10,000	25,000	35,000
Webster.....	19	1,019	6,000	45,000	51.000
Wilkins.....	12	644	10,000	25,000	35,000
Workshop...	.....	.....	1,000	1,500	2,500
Total.....	462	22,340	$463,600	$1,127,500	$1,591,100

FORTY-EIGHTH ANNUAL REPORT

OF THE

Board of Education

OF THE

CITY OF DETROIT,

FOR THE

Year Ending June 30, 1891.

DETROIT

THOS. SMITH PRINTING COMPANY, CITY PRINTERS

1891



FORTY-EIGHTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1891.

DETROIT:

THOS. SMITH PRINTING CO., PRINTERS, 11 ROWLAND STREET.

1891.

viz., the High. Pitcher, Webster, Newberry, Trowbridge Norvell, Duffield, Van Dyke and Bellefontaine, and have proved a great benefit to a very large class of pupils who could not attend during the day, and whose education had been sadly neglected in their earlier years, (which would seem to rather favor a compulsory education) and it is very desirable that they should be continued, as there is no portion of our duties more essential than this, provided the amount can be provided for their maintenance.

FREE TEXT BOOKS.

In the present advanced stage of our civilization, there are but very few bold enough to deny the beneficial results of a free education, this let us assume to be the case. It cannot be wrong to place in their hands the text books, by which this education is to be acquired. It is true that at the present time free books are given to poor children, but it is very humiliating to the children to confess the poverty of their parents, before this small boon can be received it will be much better to place all on an equal footing.

PHYSICAL CULTURE

has been introduced into all the schools with the most beneficial results. It is a great relief to the pupil, after sitting for a long time in a cramped position, to have an opportunity to bring all the different parts of the body into action. It must have a great influence on their health. The sinews of the body are both strengthened and refreshed, thus conducing to place a sound mind in a healthy body.

The Board of Estimates, prompted by some unwise spasm of economy saw fit to strike from the schedule the amount required for new school buildings and sites, which

left the Board no other resource but to apply to the Legislature for an enabling act by which the necessary funds could be raised. Accordingly a committee, together with the attorney of the Board, were delegated to proceed to Lansing for the above purpose, and their mission proved successful. The bill that was introduced for the purpose has now become law, and it is sincerely hoped that no further obstruction will be placed in the way of raising the necessary funds. "Necessity knows no law."

NECROLOGY.

The following ex-members of the Board have died within the year, viz: Eben N. Wilcox, William P. Wells, James W. Romeyn, John D. Finnigan, D. Bethune Duffield, and John Berry. Appropriate resolutions to their memory have been placed on record by the Board.

It is to be regretted that the calm harmony so needful in a deliberative body has not always existed in the meetings of the Board. At the same time it is firmly believed that all were inspired with an earnest desire to exert their best efforts in the interests that had been committed to their care. If there was a little sharp practice at times, it was not all on one side, and all was intended for the best.

Let us fondly hope that the day is far distant when political schemers and sectarian bigots can prescribe the teachers in our schools. We should always remember that the safety of the Republic can only be maintained by an intelligent people.

For a more full and extended report I refer to the reports of the superintendent and secretary.

Respectfully submitted,

WM. ADAIR,

Pres. Board of Education.

THE NEW YORK
PUBLIC LIBRARY

ASTOR, LENOX AND
TILDEN FOUNDATIONS.

REPORT OF THE PRESIDENT.

THE PRESIDENT'S REPORT.

To the Board of Education:

In accordance with the usual practice of the Board of Education, a brief synopsis of the work of the Board is herewith presented. Three new brick school buildings have been erected and will be ready for occupation by the beginning of the term, viz.: the Palmer, Jackson and Williams, which will furnish a large addition to the seating capacity of the schools.

The High School is crowded to its utmost capacity, so much so that the Board had to find accommodations for their meetings elsewhere. Rooms were secured in the Hodges' Block, where the meetings are now held and which are fairly well adapted for the purpose.

It would be a great improvement to the street and to the city if the building was removed, and which must eventually be done, as it is only a patched up concern at the best, and ill adapted to the purposes for which it is applied; at the same time it is useless to speak about this till other quarters are provided, for the school or rather schools, for at least two are required for the pressing necessity.

The schools are in a very prosperous condition. We have a corps of teachers which are second to none in the country, and under their guidance they cannot be otherwise than successful.

Night schools have been held in the following schools,

viz., the High. Pitcher, Webster, Newberry, Trowbridge, Norvell, Duffield, Van Dyke and Bellefontaine, and have proved a great benefit to a very large class of pupils who could not attend during the day, and whose education had been sadly neglected in their earlier years, (which would seem to rather favor a compulsory education) and it is very desirable that they should be continued, as there is no portion of our duties more essential than this, provided the amount can be provided for their maintenance.

FREE TEXT BOOKS.

In the present advanced stage of our civilization, there are but very few bold enough to deny the beneficial results of a free education, this let us assume to be the case. It cannot be wrong to place in their hands the text books, by which this education is to be acquired. It is true that at the present time free books are given to poor children, but it is very humiliating to the children to confess the poverty of their parents, before this small boon can be received it will be much better to place all on an equal footing.

PHYSICAL CULTURE

has been introduced into all the schools with the most beneficial results. It is a great relief to the pupil, after sitting for a long time in a cramped position, to have an opportunity to bring all the different parts of the body into action. It must have a great influence on their health. The sinews of the body are both strengthened and refreshed, thus conducing to place a sound mind in a healthy body.

The Board of Estimates, prompted by some unwise spasm of economy saw fit to strike from the schedule the amount required for new school buildings and sites, which

left the Board no other resource but to apply to the Legislature for an enabling act by which the necessary funds could be raised. Accordingly a committee, together with the attorney of the Board, were delegated to proceed to Lansing for the above purpose, and their mission proved successful. The bill that was introduced for the purpose has now become law, and it is sincerely hoped that no further obstruction will be placed in the way of raising the necessary funds. "Necessity knows no law."

NECROLOGY.

The following ex-members of the Board have died within the year, viz: Eben N. Wilcox, William P. Wells, James W. Romeyn, John D. Finnigan, D. Bethune Duffield, and John Berry. Appropriate resolutions to their memory have been placed on record by the Board.

It is to be regretted that the calm harmony so needful in a deliberative body has not always existed in the meetings of the Board. At the same time it is firmly believed that all were inspired with an earnest desire to exert their best efforts in the interests that had been committed to their care. If there was a little sharp practice at times, it was not all on one side, and all was intended for the best.

Let us fondly hope that the day is far distant when political schemers and sectarian bigots can prescribe the teachers in our schools. We should always remember that the safety of the Republic can only be maintained by an intelligent people.

For a more full and extended report I refer to the reports of the superintendent and secretary.

Respectfully submitted,

WM. ADAIR,

Pres. Board of Education.

REPORT OF THE SUPERINTENDENT

REPORT OF THE SUPERINTENDENT.

To the Board of Education:

GENTLEMEN:—I have the honor to present herewith the forty-eighth annual report of the public schools of this city.

At the beginning of my work as superintendent five years ago, there were thirty buildings, of 285 rooms, with 16,561 sittings—an average of 58 seats to a room. At the beginning of the next school year there will be fifty-three buildings, 463 rooms, and 24,216 sittings—an average of 52 seats to each room, showing an increase of twenty-three buildings, 178 rooms and 7,654 sittings during the five years.

The average membership at the close of 1886 was 14,534. During the year just closed the average membership was 19,571, showing an increase of 5,037 in that time. The average membership in 1886 was 14,534; the number of available sittings 16,561; excess of sittings 2,027. The average membership in 1891 was 19,571, and the number of available sittings 22,815; excess of sittings 3,244. It will be seen from the above figures that the supply of sittings has been greater than the demand; but this is true in a general way only; for while certain portions of the city may have more school room than is required, other portions may not have sufficient. There are various reasons for this inequality, as the rapid growth in the population in some of the newer portions of the city, the floating population in certain other parts, and the variation in the numbers promoted half-yearly from

grade to grade and class to class. It is impossible for these reasons to estimate the exact needs of any particular locality for any one year.

In all cases during the year seats have been provided upon application except when the applications were for admission to the B 1st class, during the last two months of the term; in this case the applicants were advised to wait until the beginning of the next term. In some few instances when a grammar grade class had a membership of less than ten it was thought best to distribute it among adjacent schools to save expense in the matter of instruction.

The following table will show the location of each school building, number of rooms, seating capacity, average attendance, etc:

LOCATION, NO. OF ROOMS, SEATING CAPACITY, AVERAGE ATTENDANCE, ETC.

SCHOOLS.	LOCATION.	Number of Rooms.	Number of Seats.	Average attendance for the year.	Average number of teachers for the year.	Average No. of pupils to the teacher.
Bagley	Fourteenth and Pine	6	366	283	7	41
Barstow	Larned and Riopelle	12	578	526	14	38
Bellefontaine	Morrill near Fort	10	515	465	12	39
Bellevue	Bellevue near Champlain	3	152	131	3	43
Bishop	Winder near Rivard	32	1149	935	25	39
Brownson	Maple near Chene	6	307	283	7	40
Campbell	St. Aubin and Alexandrine	6	208	198	6	33
Cass	Grand River and Second	21	1070	988	25	38
Chaney	Sullivan and Linden	6	331	243	7	35
Clay	Pitcher near Cass	8	413	323	9	36
Clinton	Clinton near Rivard	8	446	371	9	41
Craft	Vinewood and Ash	4	243	177	4	44
Custer	Hammond near Ranspach	2	125	53	2	27
Dickinson	Twelfth and Brigham	8	292	177	6½	27
Duffield	Clinton near Chene	16	909	771	18½	41
Everett	Fort near Hastings	12	640	431	13	33
Farrand	Harper and John R	6	362	293	7	42
Ferry	Ferry and Campau	8	390	218	8	27
Firnane	Fort near McDougall	6	368	246	6	41
Franklin	Seventh and Pine	6	345	253	7	36
Garfield	Rivard and Frederick	4	207	147	4	37
* Gratiot	Gratiot and Beaufait	1	108	94	2	45
Hancock	Fourteenth and Hancock	4	234	136	4	34
Hubbard	Twenty-fifth and Labrosse	6	334	258	7	37
Hickey	Eighteenth and McGraw	4	143	75	2⅓	30
High	State and Griswold	4	858	829	33	25
Houghton	Sixth and Abbott	12	584	431	14	31
Irving	Willis near Woodward	12	664	575	15	38
* Jackson	Larned and Dubois	6	300	222	6	37
Jefferson	Selden and Crawford	16	797	658	18	37
Johnston	Waterloo near Dubois	4	222	188	4	47

LOCATION, NO. OF ROOMS, SEATING CAPACITY, ETC.—CONTINUED.

SCHOOLS.	LOCATION.	Number of Rooms.	Number of Seats.	Average attendance for the year	Average number of teachers for the year.	Average No. of pupils to the teacher.
Lincoln	Brady and Antoine	8	454	368	9	37
Livernois	Livernois near Michigan	2	90	68	2	31
Miami	Miami near Wilcox	5	114	73	4½	17
McKinstry	McKinstry and McMillan	8	339	217	6	36
Newberry	Twenty ninth near Vinear	12	512	326	11½	28
Nichols	Elm near Seventh	6	317	244	7	35
Norvell	Arndt and McDougall	12	709	648	15	43
Normal	Miami Ave. near Wilcox	5	150	119	5	24
John Owen	Myrtle and Thirteenth	8	413	341	9	38
Pitcher	Sullivan near Butternut	12	585	537	16	35
Potter	Tillman near Myrtle	6	304	221	6½	34
Roberts	Adelaide near Antoine	8	294	170	5½	31
Russell	Russell and Elliott	8	438	309	9	34
Tappan	Thirteenth and Dalzelle	16	846	701	18	39
Tilden	Kirby and Seventh	12	669	612	15	41
Trowbridge	Forest near Antoine	12	604	391	13	30
Van Dyke	Field and Agnes	8	442	366	10½	35
Washington	Beaubien near Beacon	12	639	465	14	33
Webster	Twenty-first near Baker	20	1026	858	21	41
Wilkins	Porter near Second	12	644	431	13	33

NEW SCHOOLS TO BE OPENED SEPTEMBER 1st, 1891.

SCHOOLS.	LOCATION.	Number of Rooms.
Jackson	Fort near Chene	6
Palmer	Horton near Antoine	6
Williams	Canfield and Mt. Elliott	12
Waterloo	Bellevue near Waterloo	1

Early thought should be given to the subject of providing additional school facilities in the territory lately annexed to the city, as it is but meagerly supplied with school-houses and apparatus. Very careful attention should be given to the matter of the location of new buildings. In chosing a site for a new school, several things should be taken into account, as to distance from adjacent schools, the grades that are to occupy the building, and the probable future growth of the school population of the district. Some years ago when a new addition of territory was made to the city, these things were not sufficiently considered, and very grave mistakes were made in consequence.

An arrangement should also be made with the authorities in these outside schools as to the oversight of the work during the coming year by your superintendent, so as to bring the course of study, methods of instruction, etc., into conformity with our own at once, instead of waiting another year until the Board shall assume full control.

READING.

Generally speaking this study is sacrificed for others that seem more entertaining to both teachers and pupils; but in our schools during the past year I am happy to say that such has not been the case. A new interest has been awakened; and with the generous amount of supplementary reading matter furnished by the Board, much better work has been done.

The entire teaching force is growing stronger each year in methods of teaching this most important study; they seem to realize that rapid progress in all other branches depends upon the efficiency with which this branch has been treated; not in fact that the pupil shall be a fluent reader, but that he shall read intelligently, grasping the thought, but not neces-

sarily calling each unimportant word, especially in silent reading.

The benefits to the higher grades from the circulating library, furnished to the schools by the Public Library, are very decided, and there is a perceptible change for the better in the choice of selections made by the pupils; and it is the universal testimony of teachers that there is a growing taste for good reading among our school children.

REPORT OF THE SUPERINTENDENT OF DRAWING.

DETROIT, July 20, 1891.

To W. E. Robinson, Supt. of City Schools:

The year just closed has been quite uneventful, yet steady growth has marked all the grades.

In the primary department excellent work has been done as shown by the varied exhibits in different rooms, in modeling, paper work and drawing. Greater interest than usual has also been shown in the grammar grades, where construction, representation and decoration have found accurate expression in both modeling and drawing.

Every year this subject is more clearly proven to be a factor in education, and there are now but very few teachers in our schools who do not use this subject in their daily instructions of almost every branch.

I hope that before another year's record is closed that regular instruction in Color may find its place in our schools. Since form and color are the only two characteristics common

to all material things, the study of *things* themselves, which is so important a feature in all elementary work, must necessarily include the study of Color.

While we recognize the practical and educational value of this branch, I hope we shall not be too completely overcome by the strictly useful and practical.

Education means something more than to fit a man for earning his daily bread. The love of the beautiful is a constituent element in man's nature, and it cannot be neglected without positive injury to his character. The child grows into maturity step by step; as his desires are awakened he assimilates. If he passes from childhood into youth without this or that desire it becomes almost impossible in later years to arouse the same. Especially is this true concerning the beautiful. It must begin with childhood, and like all other elements in education, with material form.

The child must learn to appreciate the beautiful in his surroundings. How much more can he appreciate the beautiful in language and in character if he has learned to love the beautiful in form.

My plea is for the children of the masses that some element of beauty may enter their lives, that all may catch a glimpse of the marvelous beauty that Diotimus paints to Socrates when he says, "In order to arrive at this perfect beauty it is necessary to commence with the beauties of this lower world, and the eyes being fixed upon supreme beauty, to elevate ourselves unceasingly towards it, by passing, thus to speak, through all the degrees of the scale, from a single body to two, from two to all others, from beautiful bodies to beautiful sentiments, from beautiful sentiments to beautiful thoughts, until from thought to thought we arrive at the highest thought which has no other subject than the beautiful itself, until we end by knowing it as it is itself.

Respectfully submitted,

MYRA JONES.

REPORT OF THE SUPERINTENDENT OF MUSIC.

DETROIT, July 1, 1891.

To W. E. Robinson, Supt. of Schools:

The progress of music this past year has been very marked. Visits are made to the schools once in about three weeks, when the previous lesson is received and new work assigned. We are very glad to notice an unmistakable growing interest in this branch each year by the regular teachers, as we must depend very largely upon them for the success of our work, as well as all special studies. Very few teachers would call themselves musicians, very many know nothing of the science of music, some know nothing at all of music, hence the necessity for teachers' meetings; but these are not always practicable as there are so many demands on their time. As a rule teachers are pleased to learn how to teach music properly, and we have their hearty co-operation.

I would like to say a word regarding children's voices. Some children naturally read, speak or sing with set jaws and closed throats; but if quiet, good forward tones, with pure vowels, distinct articulation and free use of lips and jaws be always insisted upon in reading and speaking, as well as singing, there would be a great improvement in some of the children's voices.

With the close of school life most of the studies pursued are laid aside by the great majority, but not so with this one, and we, in teaching this branch, apply to music the methods that underlie all true teaching in other branches of school work, especially the methods used in teaching language and musical expression, that influence that reaches the realm of the

child's highest feeling and trains the heart and mind in the ways of virtue and right, is always made the groundwork in musical progress.

Very respectfully yours,

MRS. EMMA THOMAS,

Superintendent of Music.

REPORT OF THE SUPERINTENDENT OF WRITING.

To W. E. Robinson, Supt. of Schools:

The adoption of the Spencer's new copy-books at the beginning of the year has proved very beneficial. Both teachers and pupils are delighted with the simple manner in which business writing is taught in them.

The improvement in writing has been more marked this year than in any previous year, yet we are still far from reaching our ideal.

Much attention has been given to movement, and with good results, but there is so much miscellaneous writing required that the proper execution is very much interfered with. If less writing were required in other studies we could insist upon more accurate penmanship, which would insure better results and would bring out the dicipli- nary character of our work. "Allow no carelessness in any written work," is our motto, but how can we insist upon this when children have to write so much and so fast that they are obliged to slight their penmanship.

3. That better means for ventilation are needed in many of the older buildings.

4. That a suitable room be fixed up as a gymnasium for the young ladies of the High School.

In concluding my report I desire to express my sense of gratitude for your kind and helpful co-operation in all that has been done in this department.

Respectfully submitted,

NETTIE D. KIMBERLIN.

COURSE OF STUDY IN PHYSICAL CULTURE.

PART I.

SOME GENERAL DIRECTIONS FOR SITTING, STANDING, WALKING, GOING UP STAIRS AND MARCHING.

Sitting.—It is not expected that children should sit bolt upright in their seats during the sessions of school. But it is expected that they learn to sit in erect, and at the same time, easy or comfortable positions. The feet should be flat on the floor. If this be impossible on account of the seats being too high for the pupil, then a foot-stool or block of some kind should be provided as a foot-rest. Cramped body, stooped shoulders, or even disease, may result from occupying a seat so high that the feet cannot touch the floor.

If the pupils are requested to assume a position of order or attention they should sit with bodies erect, hands clasped and resting on the desk or in their laps. The pupil may re-

child complains of the pen and it is thrown away and a new one takes its place. If we could have bottles made to fit in the places now occupied by wells and have these bottles corked when not in use, it would prove a great saving of ink and pens, and the teacher's time and our work could be much easier und better done.

The work done by the girls in the training classes has been very satisfactory as they have given much more time to practice, particularly to blackboard writing, than formerly.

We have had many grade meetings which have been helpful, and we hope another year to make this more effective. The difficulty in voluntary meetings is that only the workers attend, while those who are unqualified are too ready to excuse themselves.

The very hearty support given by the teachers, and the enthusiasm manifested by all classes of pupils, is very encouraging, and we hope in the year to come to accomplish much.

Yours very respectfully,
W. F. LYON,
Superintendent of Writing.

PHYSICAL CULTURE.

Beginning with the year, this important branch was introduced, and the work has been carried on under the able supervision of the special teacher, Miss Nettie Kimberlin.

The movements introduced have been of the simplest kind, with no attempt to introduce anything that could inspire the teachers to strive to prepare for public exhibition, but to

keep to those movements which shall necessarily improve the children physically.

The following report from the special teacher, and printed course, which has been strictly followed, will give a correct idea of what has been done:

Department Physical Culture.

To W. E. Robinson, Supt. Detroit Public Schools:

Dear Sir,—I respectfully submit for your consideration the following report on Physical Culture, in the Public Schools, for the school year ending June 26th, 1891.

The introduction of Physical Culture in the Public Schools has met a long felt want. Children who enter our schools at the age of five or six years come to us with few, if any, physical defects.

The object of these exercises is to develop and preserve the body in such a manner that its proper growth may be attained. However, children with physical defects—due to careless habits or neglect, receive close attention so that proper adaptation of certain exercises may counteract and overcome evil tendencies in the growth of the body.

Experience teaches that success attends this department, or branch, of school work only, as it is made imperative as a school duty.

A course of study has been arranged with respect to all grades, from the chart class, or first grade, to the eighth grade and High School.

The exercises are not based exclusively on the "Ling System of Educational Gymnastics," as no one system of Physical Culture is considered perfect, but many of the

exercises are taken from the "German," "Delsarte," and what is known as the "American System" of physical training.

The progress made during the first year's work in this department has been encouraging. The Principals and Teachers have faithfully sought to accomplish the work outlined for them, and they have heartily entered into the spirit of the work.

A very noticeable improvement has been made in the *discipline* of our schools, due to the daily systematic physical exercises. Through these drills the pupils have learned the importance of order and good deportment.

The marching, or passing to and from the building, is made with reference to military precision, thus securing an erect and proud carriage of the body.

Aside from the regular drills, instruction has been given upon subjects that pertain to this work, namely: Physiology, Hygiene, or care of the body, politeness and morality.

Careful attention has been given to the ventilation, and to the sanitary condition of the school buildings. The teachers have been urged to carefully study the system of ventilation used in their respective school buildings, in order that a thorough ventilation of the rooms might be secured.

The teachers have been requested to encourage the pupils, especially the girls, to wear loose fitting clothing, and we are glad to say that the efforts of the teachers in this respect have met with success in many instances. The co-operation of parents in this matter is solicited, in order that the children may constantly wear comfortable and sensible clothing.

During the year about thirty teachers' meetings have been held. At these meetings the teachers received instructions and directions concerning the work.

Each school in the city has been visited regularly, as

often as once in every twenty days, and from ten to twenty-five minutes devoted to the lesson in each room.

All physical defects of the children have been carefully noted, and particular attention given to pupils thus afflicted, in order that certain exercises might prove beneficial.

Some of the defects noted are as follows, namely: Weak ankles, stooped and crooked shoulders, paralysis, hollow chests, St. Vitus Dance, bad carriage of the body in walking, defective speech, weak eyes, impaired nervous system, etc.

Many cases of defective eyesight have been discovered, as the following statistics show, and we are glad to state that a great number of these pupils are now being treated by competent physicians.

STATISTICS.

The following figures show the physical condition of the children of our schools as noted during the last term of the year;

Number of pupils having defective eyesight, due to weakness, myopia or presbyopia	490
Number of pupils cross-eyed	113
Number of pupils having cataract or growth on the eye	20
Total number that need attention	623
Number being treated	75
Number of pupils now wearing glasses	136
Number of pupils who have the use of only one eye	14
	225
Total number of pupils with impaired vision	848
Number of pupils deaf	98
Number of pupils having defective speech	87
Number of pupils having curvature of spine	16

Number of pupils having weak ankles, hip disease, crippled feet, arms or legs	65
Number of pupils having impaired nervous system and St. Vitus Dance	18
Total number of children with physical defects	1,132
Number of children enrolled	25,087
Children in normal condition and able to take the physical exercises	23,955

That many of the physical defects above mentioned are due to improper positions of the body during school hours is unquestioned.

Years ago, Germany, by her neglect to provide a system of physical training, had to pay a fearful penalty. She soon became, a nation noted for the impaired eyesight among her educated classes, and not until the national government took hold of the matter could anything be done to counteract the tendency to allow the children to sit and stand as they pleased.

That the children are interested in the exercises, and enjoy this branch of their work is proven by the fact that whenever the teacher omits the daily lesson or drill she is reminded of it by the pupils, and their disappointment is apparent.

Another important matter that should not be lost sight of is that the school buildings should be kept in the most healthful condition possible, and therefore it is needless for me to say that until the provisions for the successful conduct of this work in physical culture are properly made, the results can only be approximated.

I would make the following recommendations, viz.:

1. That the walls of the school buildings be calcimined or whitewashed frequently.

2. That the seats be re-arranged in some of the schools.

3. That better means for ventilation are needed in many of the older buildings.

4. That a suitable room be fixed up as a gymnasium for the young ladies of the High School.

In concluding my report I desire to express my sense of gratitude for your kind and helpful co-operation in all that has been done in this department.

Respectfully submitted,

NETTIE D. KIMBERLIN.

COURSE OF STUDY IN PHYSICAL CULTURE.

PART I.

SOME GENERAL DIRECTIONS FOR SITTING, STANDING, WALKING, GOING UP STAIRS AND MARCHING.

Sitting.—It is not expected that children should sit bolt upright in their seats during the sessions of school. But it is expected that they learn to sit in erect, and at the same time, easy or comfortable positions. The feet should be flat on the floor. If this be impossible on account of the seats being too high for the pupil, then a foot-stool or block of some kind should be provided as a foot-rest. Cramped body, stooped shoulders, or even disease, may result from occupying a seat so high that the feet cannot touch the floor.

If the pupils are requested to assume a position of order or attention they should sit with bodies erect, hands clasped and resting on the desk or in their laps. The pupil may re-

cline against the back of the seat; however, if a singing exercise is introduced, the body should then be inclined a little forward, and the chest well expanded.

Standing.—Too much attention cannot be given to the position of the body when standing for either recitations or physical exercises.

In standing for the exercises, the feet should be placed with heels together, toes out at an angle of 45°, knees straight and rigid, hips and shoulders back, head erect, chin drawn in, eyes straight to the front. The arms hang naturally at the sides, palms inclined to the front.

Walking.—In order to secure a good carriage of the body in walking, one must first learn to stand correctly, hence pupils have been taught the standing position first. In walking, the chest should be thrown forward, the head held erect, the shoulders and hips thrown back, and the general poise of the body over the balls of the feet.

The feet should not drag, and the leg should be carried forward from the hip when a step is taken, and the ball of the foot instead of the heel should be brought down first.

Going Up-Stairs.—In going up stairs the chest should be thrown out, the head kept erect. Many people bend the body at the waist in going up-stairs, and so cramp the chest that when the head of the stairs is reached great exhaustion is felt.

It is well to take in a deep breath and hold it while ascending a long flight of stairs.

Marching.—In marching there is more rigidness and precision in the carriage of the body than in ordinary walking. The position of the body is the same as for standing. Square corners must be turned, all lines kept in perfect order and pupils taught to keep perfect step.

In marching by double file, four abreast, etc., elbows touch and no lagging should be allowed.

When wheeling the one at the pivot end of the line remains almost stationary, while the one at the opposite end moves quite rapidly.

Choose good leaders and give them particular instructions aside from the general directions given the whole class.

The following directions for a *Grand March* may be carried out where the halls are large enough for marching:

March down center of hall double file; separate at the foot of the hall, one file going to the right and the other to the left, marching up the sides of hall in perfect order. Meet at upper end of hall and march down the center again double file, At foot of hall separate, one couple going to right, another to left, and so on down the line. Couples march to upper ends and come down center four abreast. Separate as couples and come down center double file, partners marching at arm's length from each other. Let partners place a hand on each other's shoulder, keeping arm straight, the other hand may be placed on the hip. March thus down the center; at the foot of hall separate, one file going to left, the other to right; at upper end of hall fall in double file and repeat the march from the beginning. End the march by whole class falling in single file, and pupils may be thus dismissed to their rooms.

This may be used as a flag drill. Each pupil carries a flag; one carries a flag with right hand, his partner carries flag with left hand, except when all march single file at the end of the march, then carry flags with right hand.

The arm should be straight and the flagstaff rest lightly against the shoulder. The end of the staff is held between the thumb and first two fingers.

VENTILATION.

The proper ventilation of the school-room is important during the physical exercise. The teacher should become thoroughly acquainted with the system of heating and ventilating employed in her respective school building. When the outside air is quite similar to the inside air, then to open the windows from the bottom is refreshing and will not cause chilliness. But in winter the marked difference between the air in the room and that outside makes it necessary for the teacher to be cautious in opening windows, in order to avoid draughts and sudden chilliness of the body. In cold weather the windows should not be opened from the bottom. The heat from the furnace may be shut off, and when this is done in rooms where the Smead system of heating is used, a current of cool, fresh air is introduced into the room through the register, and windows are to remain closed.

When practical and necessary one or two windows may be lowered from the top a few inches, closing them as soon as the pupils are through exercising. *Avoid draughts* and *sudden changes* of the air as produce chilliness or discomfort.

BREATHING EXERCISES.

A breathing exercise should be given every day in connection with the regular lesson.

The pupils may sit or stand.

If the exercise is taken while sitting the position for singing may be assumed.

Inhale through the nostrils and exhale through the mouth or through the nostrils—the latter preferable.

The teacher may give the signal to inhale and raise her hand slowly while the pupil is taking the breath. At signal to exhale her hand should be lowered slowly.

The shoulders should be kept quiet during the exercise, the chest well expanded and kept so. Instruct pupils to take a deep, full breath, but say nothing about the diaphragm. Insistance on keeping the shoulders and upper part of the chest quiet, will force the pupil to take a deep breath properly.

Teach pupils importance of keeping mouth closed during inspiration; how air during its passage through the nostrils is prepared for the lungs; effects upon the teeth by breathing with mouth open, etc.

ELEMENTARY EXERCISES.

LESSON I.

FINGER EXERCISE.

1. Arms down at sides, fists closed, stretch fingers, both hands at same time. Ready! 1, 2, 3, 4.

2. Arms out at sides level with shoulders, fists closed, stretch fingers, both hands at same time. Ready! 1, 2, 3, 4.

3. Arms high overhead, stretch fingers. Ready! 1, 2, 3, 4.

4. Arms in front, level with shoulders, stretch fingers. Ready! 1, 2, 3, 4.

LESSON II.

SHOULDER MOVEMENT.

1. Hands on hips, fingers front and close together, thumbs back so that they touch or nearly touch, move elbows and shoulders back, both at same time. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

[The head should be held erect during this exercise, and there should be no jerking, but a steady movement.]

LESSON III.

ARM MOVEMENTS.

1. Swing whole arm out at side, level with shoulder. Right arm twice. Ready! 1, 2. Left arm twice. Ready! 1, 2. Both arms. Ready! 1. 2, 3, 4.

LESSON IV.

2. Same as No. one, only swing whole arm to front, level with shoulders.

LESSON V.

FOOT EXERCISE.

1. Hands on hips, raise the heels. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

[The heels should be raised slowly, the body kept erect and well balanced on the toes or balls of the feet; lower the

heels slowly. To vary the exercise the teacher may count eight or ten as the heels are raised and the same as the heels are lowered. Also, when the heels are raised have pupils hold the position a moment before heels are lowered.]

LESSON VI.

TRUNK BENDING.

1. Bend body forward from the hips, keeping knees rigid. Bend body backward, keeping head on a level with body. Alternate these movements through four counts. Ready! 1, 2, 3, 4.

2. Bend body to right from waist, keeping knees straight. Bend body to left. Alternate these movements through four counts. Ready! 1, 2, 3, 4.

LESSON VII.

FOOT RAISING.

1. Raise right foot backward, knees remain on a level with each other. Ready! 1, 2, 3, 4.

2. Raise left foot backward. Ready! 1, 2, 3, 4.

LESSON VIII.

STEPPING EXERCISE.

1. Hands on the hips. Step to front with right foot, touching floors with toes only, keeping knees straight. Ready! 1, 2, 3, 4.

2. Step to front with left foot. Ready! 1, 2, 3, 4.

4. Alternate numbers 1 and 2. Ready! 1, 2, 3, 4.

LESSON IX.

ARM MOVEMENTS.

1. Swing whole arm out to side and to vertical position overhead. Ready! 1, 2.

2. Swing left arm same. Ready! 1, 2.

3. Swing both arms overhead till parallel. Ready! 1, 2, 3, 4.

[When arms are raised palms face head; when lowered, palms are turned outward.]

LESSON X.

ARM MOVEMENT—continued.

1. Swing right arm to front and overhead, elbows rigid. Ready! 1, 2.

2. Swing left arm same. Ready! 1, 2.

3. Swing both arms to front and overhead, keeping arms parallel. Ready! 1, 2, 3, 4.

[In this exercise when both arms are raised, the chest should be thrown well forward, the shoulders and hips kept back.]

LESSON XI.

HEAD MOVEMENT.

1. Bend head forward and backward alternately. Ready! 1, 2, 3, 4.

3. Bend head to right and left alternately. Ready! 1, 2, 3, 4.

3. Bend head forward, then to right, then back, then to left. Ready! 1, 2, 3, 4.

4. Bend head forward, then to left, back and right. Ready! 1, 2, 3, 4.

LESSON XII.

HAND EXERCISE.

1. Arms extended out at sides level with shoulders, fists closed: Bend right hand upwards towards back of wrist, then to straight position, then downward as far as possible. Ready! 1, 2.

2. Bend left hand same. Ready! 1, 2.

3. Bend both hands same. Ready! 1, 2.

LESSON XIII.

FOOT EXERCISE.

1. Raise toes eight times. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

[Do not allow body to bend at waist during this exercise, but keep the perpendicular line of the body well balanced over the heels.]

4. Alternate the movements under lesson V and XIII through eight counts. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON XIV.

ARM MOVEMENT.

1. Thrust right arm down from the chest. Ready! 1, 2.

2. Thrust left arm down same. Ready! 1, 2.

3. Thrust arms down alternately. Ready! 1, 2.

4. Thrust arms down together. Ready! 1, 2.

LESSON XV.

ARM MOVEMENT.

1. Same as Lesson XIV, only thrust to front, level with shoulders.

LESSON XVI.

ARM MOVEMENTS.

1. Finger tips on shoulders, elbows out at sides on level with shoulders. Straighten right arm sideways. Ready! 1, 2.

2. Left arm same. Ready! 1, 2.

3. Straighten arms alternately. Ready! 1, 2.

4. Straighten both arms. Ready! 1, 2.

5. Same position, straighten right arm upwards. Ready! 1, 2.

6. Left arm same. Ready! 1, 2.

7. Straighten arms alternately. Ready! 1, 2.

8. Straighten both arms. Ready! 1, 2.

EXERCISE XVII.

ARM MOVEMENT.

1. Swing right arm sideways to shoulder-level, on count one; on count two, swing the arm to front and level with shoulders; on count three, swing back to side position,

and on count four, drop arm to side of body. Ready! 1, 2, 3, 4.

2. Swing left arm sideways, to front, to side and down. Ready! 1, 2, 3, 4.

EXERCISE XVIII.

ARM MOVEMENT.

Arms to front, shoulder-level, hands apart the width of the shoulders, swing arms back horizontally. Ready! 1, 2, 3, 4, 5 6, 7, 8.

EXERCISE XIX.

BODY MOVEMENT.

Arms high overhead and parallel, twist the body to right and left alternately, Ready! 1, 2, 3, 4.

LESSON XX.

BODY BENDING.

Hands on the hips, bend body forward diagonally to the right and left alternately. Ready! 1, 2, 3, 4.

LESSON XXI.

FOOT EXERCISE.

1. Swing right forward, keeping the knee rigid. Ready! 1, 2.

2. Swing left forward. Ready! 1, 2.

LESSON XXII.

SHOULDER EXERCISE.

1. Rotate the right shoulder. Ready! 1, 2, 3, 4.
2. Rotate the left shoulder. Ready! 1, 2, 3, 4.
3. Rotate both shoulders. Ready! 1, 2, 3, 4.

LESSON XXIII.

ARM MOVEMENT.

1. Thrust right arm to front and sideways alternately. Ready! 1, 2, 3, 4.

2. Thrust left arm to front and sideways alternately. Ready! 1, 2, 3, 4.

3. Right arm up, left arm down, stretch fingers. Ready! 1, 2, 3, 4.

4. Left arm up, right arm down, stretch fingers. Ready! 1, 2, 3, 4.

LESSON XXIV.

1. Place hands on shoulders, straighten arm sideways. Ready! 1, 2.

2. Straighten left arm sideways. Ready! 1, 2.

3. Straighten arms alternately. Ready! 1, 2.

4. Straighten both arms. Ready, 1, 2.

LESSON XXV.

1. Hands on chests, fists closed, bend body forward and thrust arms downward alternately. Ready! 1, 2, 3, 4.

2. Body erect, thrust arms forward alternately. Ready! ,2, 3, 4.

3. Repeat number one.

FIRST AND SECOND GRADES.

FIRST SERIES.

LESSON I.

1. Breathing exercise.

2. Finger exercise. Stretch Fingers four times with arms down at sides. Same with arms out at sides. Same with arms overhead. Same with arms in front.

3. Elbow and shoulder movements, eight counts.

LESSON II.

1. Swing whole arm at side, overhead. The elb must be kept rigid and the arms swung to vertical overh Right, two counts. Left, two counts. Both, four count

LESSON III.

1. Swing whole arm to front and overhead. two counts. Left, two counts. Both, four counts.

LESSON IV.

1. Stretch arms high overhead, keeping feet flat on floor, eight counts.

LESSON V.

1. Raise heels. Ready! 1, 2, 3, 4, 5 6, 7, 8.
2. Raise toes. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON VI.

1. Step to front with right foot four times. Step to front with left foot four times. Step to rear with left foot four times.

LESSON VII.

1, Bend the knees, keeping body erect, eight times.

2. Raise arms overhead and raise on toes. Stretch thus through eight counts.

LESSON VIII.

1. Bend body forward and backward alternately through four counts.

LESSON IX.

1. Bend body to right and left alternately through four counts.

2. Bend head forward and backward alternately through four counts.

3. Bend head to right and left alternately through four counts.

SECOND SERIES.

LESSON I.

1. Hands down at side, swing whole arm to front, level with shoulder. Right, two counts. Left, two counts. Alternate, two counts. Both two counts.

2. Hands on hips. Hop on right foot four times. Left foot four times. (Omit this exercise when thought best, on account of the noise.)

LESSON II.

1. Bend body forward to right, back, to left. Ready 1, 2, 3, 4.

2. Bend head forward, right, back, left. Ready 1, 2, 3, 4.

LESSON III.

1. Bend body forward, then to left, then back and to right. Ready! 1, 2, 3, 4.

2. Bend head forward, then to left, then back and to right. Ready! 1, 2, 3, 4.

LESSON IV.

1. Step with right foot front, then to rear, alternating the movements. Ready! 1, 2, 3, 4.

2. Step with left foot to front, then to rear, alternating e movements. Ready! 1, 2, 3, 4.

LESSON V.

1. Arms at sides. Raise right fore-arm till the finger-›s touch the shoulder. Ready! 1, 2.

2. Raise left fore-arm till finger-tips touch the shoulder. eady! 1, 2.

3. Alternate the movements. Ready! 1. 2.

4. Raise both fore-arms. Ready! 1, 2.

LESSON VI.

1. Finger exercise as in first series.

2. Bend the knees eight times.

LESSON VII.

1. Hands on the chest, fists closed. Thrust right arm ›wn twice. Left arm twice. Clap hands four times.

2. Thrust right arm sideways, two times. Left, two mes. Clap hands four times.

3. Thrust right arm straight overhead, twice. Left, vice. Clap hands four times.

4. Thrust right arm to front, level with shoulder, two mes. Left, two times. Clap hands four times.

LESSON VIII.

1. Raise the heels eight times,
2. Raise the toes eight times.

LESSON IX.

1. Class face to the right. Swing arms to front of body, level with shoulders. Ready! 1, 2, 3, 4.

2. Class face to front position. Swing arms sideways to level of shoulders. Ready! 1, 2, 3, 4.

3. Class face to left. Swing arms to front of body, level with shoulder. Ready! 1, 2, 3, 4.

THIRD AND FOURTH GRADES.

FIRST SERIES.

LESSON I.

1. Finger exercise.
2. Shoulder exercise, with hands on the hips.

LESSON II.

1. Arms at sides. Swing right arm sideways, overhead, elbows rigid. Ready! 1, 2.

2. Swing left arm sideways, overhead. Ready! 1. 2.

3. Swing both arms sideways, overhead. Ready! 2, 3, 4.

LESSON III.

1. Swing right arm to front, overhead. Ready! 1, 2.

2. Swing left arm to front, overhead. Ready! 1, 2.

3. Swing both arms to front, overhead. Ready! 2, 3, 4.

LESSON IV.

1. Raise the heels ten times.

2. Raise the toes ten times,

3. Raise the toes and heels, alternately, eight times.

LESSON V.

1. Raise the right foot backward till the leg below the ıee is parallel with the floor, knees must be kept together. eady! 1, 2, 3, 4.

2. Raise the left foot. Ready! 1, 2, 3, 4.

LESSON VI.

1. Bend the knees, at same time raise the heels. Ready! 2, 3, 4, 5, 6, 7, 8.

LESSON VII.

1. Bend the body forward and backward, alternately. Ready! 1, 2, 3, 4.

2. Bend the body to right and left, alternately. Ready! 1, 2, 3, 4.

[In this exercise keep the knees rigid. The head must move on a line with the body. The eyes should look straight ahead in the direction in which the head is turned.]

LESSON VIII.

Pupils sit and take position the same as for singing.

1. Hold body quiet. Bend head forward and backward, alternately. Ready! 1, 2, 3, 4.

2. Bend head to right and left, alternately. Ready! 1, 2, 3. 4.

3. Bend the head forward, then to the right, then back and to the left. Ready! 1, 2, 3, 4.

LESSON IX.

Raise arms high overhead, palms front, thumbs together. Bend body forward till hands are opposite knees. Ready! Down! 1, 2, 3, 4, 5, 6, 7, 8.

Up! 1, 2, 3, 4, 5, 6, 7, 8.

SECOND SERIES.

LESSON I.

1. Hands on the chest, fists closed, thrust right hand

down, then up, alternating the movements. Ready! 1, 2, 3, 4.

2. Thrust left hand down and up, alternately. Ready! 1, 2, 3, 4.

LESSON II.

Thrust right hand down and left hand up at the same time; then left down and right up at same time. Alternate these movements. Ready! 1, 2, 3, 4.

LESSON III.

1. Arms down at sides. Raise right shoulder. Ready! 1, 2.

2. Raise left shoulder. Ready! 1, 2.

3. Raise shoulders alternately. Ready! 1, 2.

4. Raise both shoulders. Ready! 1, 2.

LESSON IV.

1. Hands on the hips. Step to front with right foot, at same time bend right knee. Ready! 1, 2.

2. Step to front with left foot, at same time bend left knee. Ready! 1, 2.

3. Alternate 1 and 2. Ready! 1, 2, 3, 4.

LESSON V.

1. Raise heels and toes alternately. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON VI.

1. Swing right arm to front, level with shou Ready! 1, 2.

2. Swing left arm. Ready! 1, 2.

3. Swing both arms. Ready! 1, 2, 3, 4.

LESSON VII.

1. Hands on the hips. Twist body to right and alternately. Ready! 1, 2, 3, 4.

LESSON VIII.

1. Right arm extended sideways, left arm to fi Stretch fingers. Ready! 1, 2, 3, 4. Arms down.

2. Left arm extended sideways, right arm to fi stretch fingers. Ready! 1, 2, 3, 4.

LESSON IX.

1. Raise right knee. Ready! 1, 2, 3, 4.

2. Raise left knee. Ready! 1, 2. 3, 4.

3. Bend both knees. Ready! 1, 2, 3. 4, 5, 6, 7, 8.

LESSON X.

1. Raise right arm to front, overhead, at same step to rear with right foot. Ready! 1, 2.

2. Raise left arm and step to rear with left foot. Ready! 1, 2.

LESSON XI.

1. Hands on the chest, fists closed, thrust right hand down! Ready! 1, 2,

2. Thrust left hand down. Ready! 1, 2.

3. Clap hands four times.

4. Thrust right hand overhead. Ready! 1, 2.

5. Thrust left hand up. Ready! 1, 2.

6. Clap hands four times.

FIFTH AND SIXTH GRADES.

FIRST SERIES.

LESSON I.

1. Finger exercise.

2. Shoulder exercise. Arms down at sides, raise right shoulder. Ready! 1, 2.

3. Raise left shoulder. Ready! 1, 2.

4. Raise shoulders alternately. Ready! 1, 2.

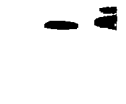
5. Raise both shoulders. Ready! 1, 2, 3, 4, 5, 6.

LESSON II.

1. Hands on chest, fists closed, strike to right with

right hand, then twist body to left, and strike to left with  right hand. Ready! 1, 2, 3, 4.

2. Strike to left with left hand, then twist to right, and  strike to right with left hand. Ready! 1, 2. 3, 4.

3. Twist to right and strike to right with both hands.  Ready! 1, 2, 3. 4.

4. Twist to left and strike to left with both hands. Ready! 1, 2, 3, 4.

LESSON III.

Inhale a deep, full breath; at same time raise arm  slowly out at sides to level with shoulders. Ready! 1, 2, 3, 4, 5, 6.

LESSON IV.

1. Raise heels, hands on the hips. Ready! 1, 2, 3, 4 5, 6, 7, 8.

2. Raise the toes. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

3. Raise toes and heels alternately. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON V.

1. Raise right foot backwards till leg below the knee is parallel with the floor. Knees must be kept together. Ready! 1, 2, 3, 4.

2. Raise left root backward. Ready! 1, 2, 3, 4.

LESSON VI.

1. Raise right knee. Ready! 1, 2, 3. 4.

2. Raise left knee. Ready! 1, 2, 3, 4.

3. Bend both knees, and raise heels at same time. eady! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON VII.

1. Bend body forward and backward, alternately. eady! 1, 2, 3, 4.

2. Bend body to right and left, alternately. Ready! 2, 3, 4.

LESSON VIII.

1. Bend body forward, then to right, then back and to ft. Ready! 1, 2, 3, 4.

2, Bend body forward, then to left, then back and to ght. Ready! 1, 2, 3, 4.

LESSON IX.

Pupils sit as for singing.

1. Bend the head forward and backward, alternately. .eady! 1, 2, 3, 4.

2. Bend the head to right and left, alternately. Ready! , 2, 3, 4.

3. Bend the head forward, then to right, then back and) left. Ready! 1, 2, 3, 4.

4. Bend the head forward, then to left, then back and) right.

LESSON X.

Pupils stand. Arms in front, level with the shoulders, palms facing each other, hands apart the width of the shoulders.

1. Raise right arm to straight overhead. Ready! 1, 2. Left! 1, 2. Alternate! 1, 2. Together! 1, 2.

2. Hands on the hips. Swing right foot across to left side, touching the floor with toes, just in front of left foot. Ready! 1, 2, 3, 4.

3. Swing left foot across to right side. Ready! 1, 2, 3, 4.

4. Alternate numbers 2 and 3. Ready! 1, 2, 3, 4.

LESSON XI.

Swing both arms sideways overhead till finger tips touch. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

SECOND SERIES.

LESSON I.

1. Arms extended in front, elbows rigid, palms together, slide the hands. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

2. Hands closed in their position under the chin. Thrust right arm down two times. Left, two times. Alternate, two times. Together, two times.

LESSON II.

Hands on shoulders. Thrust right arm up two times. Left, two times. Alternate, two times. Together, two times.

LESSON III.

1. Swing right foot across to left side, without touching the foot to the floor. Ready! 1, 2, 3, 4.

2. Swing left foot across to right side, without touching the foot to the floor. Ready! 1, 2, 3, 4.

LESSON IV.

1. Bend the knees and raise heels. Ready! 1, 2, 2, 4, 5, 6, 7, 8.

2. Step to front with right foot. Hold position and bend knees alternately, swaying the body to and fro. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

3. Same as number 2, with left foot.

LESSON V.

1. Twist body to right and left, alternately. Ready! 1, 2, 3, 4.

2. Bend body forward, to right, back, and to left. Ready! 1, 2, 3, 4.

LESSON X.

Pupils stand. Arms in front, level with the shoulde- palms facing each other, hands apart the width of t shoulders.

1. Raise right arm to straight overhead. Ready! 1, Left! 1, 2. Alternate! 1, 2. Together! 1, 2.

2. Hands on the hips. Swing right foot across to le side, touching the floor with toes, just in front of left fo Ready! 1, 2, 3, 4.

3. Swing left foot across to right side. Ready! 1, 2, 3, 4

4. Alternate numbers 2 and 3. Ready! 1, 2, 3, 4.

LESSON XI.

Swing both arms sideways overhead till finger tips touc Ready! 1, 2, 3, 4, 5, 6, 7, 8.

SECOND SERIES.

LESSON I.

1. Arms extended in front, elbows rigid, palm gether, slide the hands. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

2. Hands closed in their position under the Thrust right arm down two times. Left, two times. nate, two times. Together, two times.

2. Swing arms overhead till finger-tips touch. At same time step to front with left foot. Ready! 1, 2, 3, 4.

3. Arms extended sideways, swing them forcibly about the chest (as teamsters warming their hands). Ready! 1, 2, 3, 4, 5, 6.

SEVENTH AND EIGHTH GRADES.

FIRST SERIES.

LESSON I.

1. Finger exercise. Stretch the fingers and extend them in all directions, First position, arms down at sides. Second position, arms sideways. Third position, arms overhead. Fourth position, arms to front. Stretch fingers four times in each position,

2. Hands on hips; move shoulders and elbows back. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

LESSON II.

1. Arms at sides, close fists, twist right arm half way around. Ready! 1, 2.

2. Twist left arm half way around. Ready, 1, 2.

3. Twist both arms around. Ready! 1, 2, 3, 4.

LESSON III.

1. Swing right arm overhead, palm outwards, elbow rigid. Ready! 1, 2.

2. Swing left arm overhead. Ready! 1, 2.

3. Swing both arms overhead. Ready! 1, 2, 3, 4.

(In this exercise the chest should be well to the front, and hips and shoulders back.)

4. Bend right knee until only the toes of the right foot remain on the floor. Ready! 1, 2, 3, 4.

5. Bend left knee. Ready! 1, 2, 3, 4.

5. Bend both knees, at same time raise the heels. Ready! 1, 2, 3, 4.

LESSON IV.

1. Swing right foot across to left side. touching floor just in front of left foot. Ready! 1, 2, 3, 4.

2. Swing left foot. Ready! 1, 2, 3, 4.

3. Raise both arms slowly to shoulder-level, at same time inhale a deep, full breath; exhale while arms are lowered. Ready! Inhale! 1, 2, 3, 4, 5, 6, 7, 8. Exhale! 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

LESSON V.

1. Bend body forward and backward, slowly. Ready! 1, 2, 3, 4.

2, Twist body to right and left. Ready! 1, 2, 3, 4.

3. Bend body forward to right, backward, and to left.

4. Bend body forward, to left, backward, and to right. Ready! 1, 2, 3, 4.

LESSON VI.

1. Bend head forward and backward, alternately. Ready! 1, 2, 3, 4.

2. Twist head to right and left, alternately. Ready! 1, 2, 3, 4.

3. Roll the head around, describing a circle. Drop the head on the chest and roll head to right, back, left and front. Ready! 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

LESSON VII.

1. Arms in front, palms together, slide hands up and down eight times. With arms still extended and apart the width of the shoulders, raise right arm overhead. Ready! 1, 2. Raise left arm. Ready! 1, 2. Raise arms alternately. Ready! 1, 2. Raise arms together. Ready, 1, 2.

LESSON VIII.

1. Clasp hands back of body, as high as possible. Thrust hands down eight times.

2. Clap hands overhead four times, then instantly fold arms in front of body and stand thus through four counts.

Clap hands back of body four times, and then instantly fold arms back of body and stand thus through four counts.

3. Repeat number 2.

4. Hands on hips. Swing right foot across to left side and to rear of left foot, bowing the body slightly to the right. Ready! 1, 2, 3, 4.

5, Swing left foot to right side and back of body. Ready! 1, 2, 3, 4.

LESSON IX.

1. Stretch arms high overhead and raise heels. Ready! 1, 2, 3, 4.

2. Facings or turnings. To face to the left, pivot on the left heel and toes of right foot. The right foot is then brought up at right angle to the left, thus completing the turn.

3. When facing to the right the order is reversed by pivoting on the heel of the right and toes of the left, the entire weight of the body resting on these parts while turning.

Commands for facing are given thus: To the left, Face! 1, 2. To the right, Face, 1, 2.

SECOND SERIES.

LESSON I.

1. Facing. When making the left (or right)-about-turn, the same order is used as in left-face or right-face.

2. Hands clasped back of the neck, bend body to right and left alternately. Ready! 1, 2, 3, 4.

3 Swing right arm first side and overhead, then to front overhead. Ready! 1, 2.

4. Swing left arm first to side overhead, then to front overhead. Ready! 1, 2.

5. Swing both arms. Ready! 1, 2, 3, 4.

LESSON II.

1. Body erect, palms resting on chest near the shoulders, straighten and swing right arm to rear. Ready! 1, 2.

2. Left arm same. Ready! 1, 2.

3. Both arms. Ready! 1, 2, 3, 4.

4. Raise right knee. Ready! 1, 2, 3, 4.

5. Raise left knee. Ready! 1, 2, 3, 4.

LESSON III.

1. Hands clasped back of neck, bend knees and at same time raise heels. Ready! 1, 2, 3, 4, 5, 6.

2. Stretch the fingers. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

3. Fore-arms extended to front. Move the hands around in circles as a wrist exercise. Count eight.

LESSON IV.

1. Raise right foot a few inches from the floor and bend the ankle. Ready! 1, 2, 3, 4.

2. Raise left foot, bend ankle. Ready! 1, 2, 3, 4.

3. Arms high overhead, parallel. Bend body to right and left alternately. Ready! 1, 2, 3, 4.

LESSON V.

1. Advance right foot, stand firm, arms overhead, bend body backwards. Ready! 1, 2.

2. Same with left foot advanced. Ready! 1, 2.

3. Raise right arm overhead, left arm out at side, shoulder level at same time. Ready! 1, 2.

4. Raise lest arm overhead, right arm as side, shoulder level. Ready! 1, 2.

LESSON VI.

1. Elbows raised at sides, shoulder level, finger-tips touch in front of chest, straighten right arm. Ready! 1, 2.

2. Straighten left arm. Ready! 1, 2.

3. Straighten both arms. Ready! 1, 2, 3, 4.

LESSON VII.

1. Raise heels eight times.

2. Raise toes eight times.

3. Advance right foot, arms overhead, raise heels. Ready! 1, 2, 3, 4.

4. Advance left foot, etc. Ready! 1, 2, 3, 4.

LESSON VIII.

1. Twist body to right and left, alternately. Ready! 1, 2, 3, 4.

2. Head bending forward and backward. Ready! 1, 2, 3, 4.

3. Twist head to right and left. Ready! 1, 2, 3, 4.

LESSON IX.

1. Hands on the hips, bend body to the right and hold this position while left elbow is raised to level of left shoulder. Ready! 1, 2, 3, 4.

2. Bend to left and raise right elbow. Ready! 1, 2, 3, 4.

3. Stand erect and raise both elbows to shoulder-level. Ready! 1, 2, 3, 4.

LESSON X.

1, Swing right arm overhead and at same time bend body to left. Ready! 1, 2.

2. Swing left arm and bend body. Ready! 1, 2.

3. Bend body forward, then to right, then back and to left. Ready! 1, 2, 3, 4.

LESSON XI.

1. With body bent forward and hands closed on the chest, thrust the arms alternately downward and forward. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

2. Raise elbows high, fists closed near the arm-pits, thrust both arms down vigorously. Ready! 1, 2, 3, 4.

LESSON XII.

1. Arms extended at sides, shoulder-level, fists closed. Bend the hands upward and downward, alternately, as a wrist exercise. Ready! 1, 2, 3. 4.

2. Arms down at sides, stretch fingers eight times.

3. Swing right arm from shoulder, describing a circle, keeping elbow rigid. Swing arm first to rear, then overhead, then front and down at side. Ready! 1, 2, 3, 4, 5, 6, 7, 8.

SUGGESTIONS TO TEACHERS.

At least ten minutes every day should be given to physical exercises in the Primary Grades, and fifteen min if possible in the Grammar Grades.

While the exercises should be done with animatio

ıeerfulness, there should be at the same time an order and rict attention on the part of the pupil that will enable him execute the leader's commands with precision and accu-cy, thus securing uniformity of movement throughout the hole class.

It should be remembered that physical training means *reservation* as well as development, The teacher should, erefore, impress upon the minds of the pupils the import-ıce of caring for the body. This may be done by occasional lks on physiology and the laws of health.

Among the topics suggested for such talks in all the diff-ent grades are the following:

I. THE SKIN.

(*a*) Its structure; its use as a covering.

(*b*) The perspiratory glands; their use; effect if these ands are closed; effect of exercise on the skin.

(*c*) The nails and hair; care of these.

(*d*) Bathing and care of the skin.

II. THE MUSCLES AND BONES.

(*a*) Structure and use of each.

(*b*) Development of the muscles; effects of exercise ɔon the same.

(*c*) Growth of the bones.

III. THE EYES.

(*a*) Importance and situation.

(*b*) How they may be injured by abuse.

(*c*) Training of the eyesignt.

IV. THE EARS.

(*a*) Structure and situation.

(*b*) How this sense may be injured by abuse.

(*c*) The trained ear, as that of a musician, the savage [redacted] certain animals, etc.

(*d*) Care of the ears.

V. SMELL AND TASTE.

(*a*) Uses and care of these senses.

VI. THE BLOOD.

(*a*) Difference in color of pure and impure blood.

(*b*) Use of blood in conveying nourishment to the tissues.

(*c*) Effect of exercise and respiration upon the blood.

(*d*) Treatment of injuries to blood vessels.

VII. FOOD AND DIGESTION.

(*a*) Use of food and kinds.

(*b*) Kind of food used in cold climates; hot; temperat

(*c*) Value of a mixed diet.

(*d*) Effect of exercise upon digestion.

VII. THE TEETH.

(*a*) Structure.

(*b*) How injured.

(*c*) Care.

IX. CLOTHING.

(*a*) Value of cotton clothing; woolen.

(*b*) Cleanliness and need of frequent changing.

(*c*) Must be worn so as to allow perfect freedom to the body. Bad effect of tight clothing.

X. THE LUNGS.

(*a*) Structure.

(*b*) Air we breathe. Changes of the air about us from respiration.

(*c*) Difference between inspired and expired air.

(*d*) Care of the lungs; effects of exercise upon these organs.

XI. THE BRAIN.

(*a*) Situation and use.

(*b*) "A sound mind in a sound body."

(*c*) The nervous system; likened to a telegraphic system of communication. The brain, the central office from which radiates the lines or nerves that carry messages to and fro throughout all parts of the body, thus directing all movements of the muscles.

Experience teaches that success attends physical culture

as a branch of school work only as it is made imperative as a school duty. A complete course of study should be arranged with respect to the different grades, and such exercises selected as are most useful in enforcing the laws of life and of health.

The exercises must be based upon scientific principles to properly develop the muscles systematically, and they must be adhered to *daily*.

Prof. Ling, whose methods of physical culture have been used in so many schools of Europe, was a prominent physiologist, and the success of his system can no doubt be attributed to the fact that he sought constantly to apply his methods scientifically.

There must be a knowledge of the structure of the human body, and of the means of preserving health, at the same time, thoughtfulness in the exercises, in order to obtain most beneficial results.

The teacher should look for and expect better work from her pupils in their *studies*, as a direct result from the physical training they receive. As the circulation and purity of the blood is much improved by exercise, it is reasonable to conclude that the activity of the brain will be increased, and the mental powers awakened.

"Exercise develops a consciousness of power, which inspires courage, confidence and resolution, and through its influence the moral self comes forth healthier, purer and stronger."

Evening Schools.

The number of these schools was again increased fro five to nine, but the expense during their term justifies me saying that a fewer number, and well patronized, wo

result in a greater amount of good to a greater number The expense of maintaining so many is proportionately greater, as the items of principals, fuel, lights and janitors is greater per capita than if a smaller number of well selected locations were made. The attendance would be larger per teacher, and the interest keener than where a large number of schools are opened, with a small attendance. There is a class that attends these schools, and it is a large percentage of those enrolled who are quite regular in attendance for three or four weeks, when interest seems to lag and they put in an appearance once or twice a week for a short time and then stop coming. With this class what little they have been in school has been a damage rather than a benefit, for it increases their tendency to fickleness of purpose ; whereas they should form habits of continuity.

The plan in use for several years of assessing each applicant one dollar as a guaranty of good faith and conduct, to be returned at the close of the term if all requirements had been faithfully carried out, was the best of any we have tried, to insure regular attendance and should be again adopted.

NORMAL TRAINING CLASS.

With this year closes the tenth year of this school. During that time 242 graduates have gone out into the schools. Of that number 200 are now teaching in the public schools. This school is now the main source from which the schools are supplied with instructors in the primary grades ; and these young teachers almost without exception render excellent service. The school itself is a center from which emanates new ideas and newer and better methods in the teaching of every subject of study and of broad pedagogical learning ; and its graduates passing out into the

schools carry with them and disseminate this knowledge while in their daily work they are often times an inspiration and incentive to those who have not had this kind of training.

Until two years ago the pupil teachers were under the instruction and supervision of the Normal teachers for one year only, after which, if their work had been satisfactory they were awarded a diploma. But a change was deemed advisable. Each class is now under the supervision of the Normal teacher for two years. A certificate only is given at the end of the first year ; but if the student's work continues to be acceptable, and she shows satisfactory evidence of progression in teaching, they are awarded a diploma at the end of the second year.

UNGRADED SCHOOL.

The increased enrollment in this school is due to several causes.

The ample quarters, with every facility to make any school successful, the untiring efforts of both teachers and officers, the central location of the building and the admission of those pupils who are without proper classification have all been instrumental in increasing the enrollment.

During the year there have been enrolled 307 pupils, of which 264 were boys and 43 girls, and were derived from the following sources : 116 were received by transfer from other city schools 99 were new pupils not enrolled in other schools, and 92 returned that were in attendance last year.

The number enrolled are accounted for as follows : 122 in attendance at the close of the year, 40 were returned to the city schools, 102 are at work, 26 have left the city, 6 have been sent to the Reform School, and 71 are at home.

The officers have made during the year 4932 visits,

have served 489 notices, recorded 444 reports and have investigated 1721 transfers.

I wish to officially commend both teachers and officers in charge, for their untiring efforts in behalf of this School, in which are assembled a class of pupils whose home training and surroundings are degrading in nearly every particular. That in many cases hunger attends them daily, and who are strangers to kind words and those many loving attentions that are lavished upon the majority of the children of our city.

ENROLLMENT, ATTENDANCE, ETC., IN EACH SCHOOL.

SCHOOLS.	Total enrollment including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 30, 1891.
Bagley	605	306	286	7
Barstow	1004	552	526	14
Bellefontaine	1021	496	465	12
Bellevue	244	138	131	3
Bishop	2134	1048	985	25
Brownson	484	301	288	7
Campbell	464	228	196	5
Cass	2125	986	938	23
Chaney	478	261	248	7
Clay	745	348	328	9
Clinton	902	399	371	9
Craft	352	188	177	4
Custer	95	57	53	2
Dickinson	380	186	177	7
Duffield	1806	816	771	19
Everett	938	458	431	13
Farrand	611	315	293	7
Ferry	457	238	218	8
Firnane	482	264	246	6
Franklin	530	273	253	7
Garfield	317	163	147	4
Gratiot	145	99	94	2
Hancock	283	146	136	4
Hubbard	487	269	253	7
Hickey	162	82	75	3
Houghton	955	458	431	14
Irving	1125	612	575	15
Jackson	461	239	222	6
Jefferson	1443	714	658	18
Johnston	360	203	188	4
Lincoln	713	354	333	9

ENROLLMENT, ATTENDANCE, ETC.,—CONTINUED.

SCHOOLS.	Total enrollment including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 30, 1891.
.....	138	73	63	2
y	412	233	217	6
r	603	318	326	12
.....	565	264	244	7
.....	1156	674	648	15
.....	259	125	119	5
en	690	358	341	9
.....	863	551	527	15
.....	518	249	231	7
.....	421	182	170	7
.....	724	333	309	9
.....	1609	734	701	18
.....	1214	653	612	15
ge.	834	406	391	18
s	794	384	366	11
on	972	508	465	14
.....	2106	911	852	21
.....	958	453	431	13
l	307	93	75	5
.....	1144	853	829	33
.....	.....	.....	.....	7
.....	38,560	19,571	18,402	526

m of the enrollments in all the schools, in-
ng transfers from one school to another or
one room to another in the same school, is
own above..... 38,560
on account of duplicate enrollments..... 13,473

number of different names enrolled in all
chools during the year..... 25,087

ENROLLMENT, ATTENDANCE, ETC., IN EACH SCHOOL.

SCHOOLS.	Total enrollment including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 30, 1901.
Bagley	605	306	286	7
Barstow	1004	552	526	14
Bellefontaine	1021	495	465	13
Bellevue	244	188	181	5
Bishop	2134	1048	985	25
Brownson	484	301	283	7
Campbell	464	223	198	5
Cass	2125	986	938	25
Chaney	478	261	243	7
Clay	745	343	323	9
Clinton	902	399	371	9
Craft	352	188	177	4
Custer	95	57	53	2
Dickinson	380	186	177	7
Duffield	1806	816	771	19
Everett	938	458	431	13
Farraud	611	315	293	7
Ferry	457	238	218	8
Firnane	482	264	246	6
Franklin	530	273	253	7
Garfield	317	168	147	4
Gratiot	145	99	94	2
Hancock	283	146	136	4
Hubbard	487	269	258	7
Hickey	162	82	75	3
Houghton	955	458	431	14
Irving	1125	612	575	15
Jackson	461	239	222	6
Jefferson	1443	714	658	18
Johnston	360	203	188	4
Lincoln	713	354	333	9

STATEMENT OF PROMOTIONS—CONTINUED.

SCHOOLS.	GRAMMAR GRADE.			PRIMARY GRADE.			WHOLE SCHOOL.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging
Johnston	.....	.....	.....	307	76	203	307	76	203
Lincoln	.....	.....	.....	419	59	354	419	59	354
Livernois	.....	.....	.....	77	53	73	77	53	73
McKinstry	41	136	15	331	79	218	385	83	233
Newberry	138	92	60	423	78	279	561	81	340
Nichols	.....	.....	.....	436	83	264	436	83	264
Norvell	272	80	164	700	69	510	972	72	674
Normal	38	95	20	167	80	105	205	90	125
John Owen	120	88	72	401	70	287	521	78	356
Pitcher	364	81	226	471	73	325	835	76	551
Potter	.....	.....	.....	288	57	249	282	57	249
Roberts	.....	.....	.....	189	52	182	189	52	182
Russell	.....	.....	.....	464	70	333	464	70	333
Tappan	453	79	295	695	77	449	1148	78	744
Tilden	379	92	220	668	79	438	1047	80	658
Trowbridge	368	89	218	297	75	198	665	81	406
Van Dyke	177	90	97	451	79	287	628	82	384
Washington	391	75	200	459	75	308	760	75	508
Webster	614	86	357	943	85	554	1556	85	911
Wilkins	283	74	152	464	77	301	689	76	453
Totals	6,027	80	5,089	20,596	76	13,586	26,624	77	18,625

GENERAL SCHOOL STATISTICS FOR THE SCHOOL YEAR ENDING JUNE, 1891.

1.	Population of the City of Detroit (census of 1890)	205,876
2.	Valuation of the property of the City of Detroit (assessed at full value)	$ 161,828,570.00
3.	Amount of levy for all municipal purposes	2,545,327.01
4.	Amount of levy for the current expenses of the public schools	308,500.00
5.	Amount of levy for school sites and buildings	80 000.00
6.	Amount of levy for all school purposes	388,560.00
7.	Per cent. of school taxes upon the entire municipal levy	15.26
8.	Amount of money received from the Primary School Fund	95,754 38
9.	Whole cost of superintendence and instruction, including evening school and ungraded school	339,258.23
10.	Whole cost of incidentals, including all current school expenses, except those made in 9, above	137,773.12
11.	Amount paid for sites and new buildings	87,771.25
12.	Number enrolled in the public schools from every 100 counted in school census	34.3
13.	Average weeks of membership of each pupil enrolled	31.2
14.	Average weeks of attendance of each pupil enrolled	29.8
15.	Average salary of all teachers, including principals, first assistants and specials	$ 620.50
16.	Average salary of all teachers, including principals, first assistants and specials	547.96
17.	Total cost of tuition in night schools	9,076.00
18.	Total cost of tuition in ungraded school	4,000.00
19.	Per cent. of promotions on average membership	77

GENERAL SCHOOL STATISTICS FOR THE THREE DEPARTMENTS FOR THE SCHOOL YEAR ENDING JUNE 30, 1891.

	Primary Grade.	Grammar Grade.	High School.	Totals and Averages.
1. Number of different names enrolled in each department and in all the schools	18,403	6,600	1,144	25,087
2. Average membership of the schools for the year	13,679	5,089	853	19,571
3. Average daily attendance for the year	12,775	4,799	829	18,402
4. Per cent. of attendance on membership	93.3	95.2	96.8	94.2
5. Number of pupils in membership at the close of the school year	13,185	4,727	817	18,729
6. Number of men teachers during the school year including the Superintendent	3	11	9	24
7. Number of women teachers during the year	316	157	24	503
8. Average number of teachers during the year, excluding the Superintendent and special teachers	304	165	33	512
9. Average number of teachers for the year including specials	.....	.....	.....	519
10. Average number of pupils to each teacher, exclusive of specials, based on average membership	43.5	30.5	26	38.2
11. Cost of education per capita for instruction and superintendance based on average membership	$ 13 48	$ 21 64	$ 38 48	$ 16 88
12. Cost of education per capita for instruction in the Ungraded School	....	.....	.....	43 00

SCHOOL CENSUS FOR THE LAST FIFTY YEARS.

YEAR.	Census.	YEAR.	Census.
1841	2,003	1866	20,350
1842	2,280	1867	21,742
1843	2,578	1868	22,810
1844	3,146	1869	27,089
1845	3,426	1870	26,641
1846	3,882	1871	28,779
1847	5,846	1872	30,230
1848	6,546	1873	31,936
1849	6,306	1874	33,772
1850	6,965	1875	34,598
1851	7,253	1876	35,172
1852	7,883	1877	35,789
1853	8,520	1878	35,962
1854	9,983	1879	37,684
1855	9,912	1880	39,467
1856	10,502	1881	37,926
1857	12,089	1882	40,201
1858	13,138	1883	43,840
1859	13,208	1884	45,641
1860	14,159	1885	53,049
1861	14,146	1886	56,488
1862	15,398	1887	66,963
1863	16,473	1888	65,182
1864	17,399	1889	63,009
1865	18,710	1890	72,673

The following table shows the different salaries paid per school month, and the number of teachers to whom certain salaries are paid, according to the pay roll of June, 1891:

15	Teachers	at	$ 12 00
10	"	"	30 00
56	"	"	35 00
45	"	"	40 00
38	"	"	45 00
40	"	"	50 00
48	"	"	55 00
26	"	"	57 50
12	"	"	60 00
20	"	"	62 50
10	"	"	65 00
15	"	"	70 00
88	"	"	72 50
39	"	"	80 00
17	"	"	85 00
1	"	"	87 50
7	"	"	90 00
10	"	"	100 00
4	"	"	120 00
1	"	"	127 50
11	"	"	130 00
3	"	"	140 00
2	"	"	150 00
3	"	"	160 00
1	"	"	180 00
3	"	"	200 00
1	"	"	275 00

SCHEDULE OF ANNUAL SALARIES OF TEACHERS.

HIGH SCHOOL.

Principals, grade principles and teachers at the head of special departments, as agreed upon.

Other Assistants in the High School—

For first year of service	$ 600 00
For second year of service	650 00
For third year of service	700 00
For fourth year of service	750 00
For fifth year of service	800 00

Regular rates for primary and grammar school teachers.

For first year of service in the Detroit Public Schools	$ 350 00
For second year of service in the Detroit Public Schools	400 00
For third year of service in the Detroit Public Schools	450 00
For fourth year of service in the Detroit Public Schools	500 00
For fifth year of service in the Detroit Public Schools	550 00
For sixth year of service in the Detroit Public Schools	600 00
For seventh year of service in the Detroit Public Schools	650 00
For eighth year of service in the Detroit Public Schools	700 00
For ninth year of service in the Detroit Public Schools and after	725 00
First Assistants in buildings of twelve or more rooms per year	800 00
Teachers of half-day schools having more than seventy-four pupils in attendance, in addition to regular rates, per school month	5 00

PRINCIPALS.

Principals of schools of less than six rooms, $800 per year; of six rooms, $850; of eight rooms, $900; from nine to eleven rooms, $1,100; from twelve to fourteen rooms, $1,300; from fifteen to seventeen rooms, $1,600; of eighteen or more rooms, $2,000.

In case one or more rooms shall be unoccupied in any building of six or more rooms, $2.50 shall be deducted from the monthly salary of the principal for each unoccupied room.

REPORT OF PRINCIPAL OF HIGH SCHOOL.

eport of the Principal of the High School

JULY 1, 1891.

uperintendent W. E. Robinson:

The report of the High School for the year past will ive little that is new.

The growth of the school, to which your attention was rected in my last two reports, has continued, and we have ached this year an enrollment of 1,144.

The enrollment for the past nine years has been as llows :

1882–83	702
1883–84	743
1884–85	784
1885–86	839
1886–87	833
1887–88	859
1888–89	953
1889–90	1042
1890–91	1144

As in previous reports, I will append a statement of the tual membership of the school at the close of the month February, as the school is usually fullest during the first onth of the second semester :

February,	1883	611
"	1884	589
"	1885	634
"	1886	689
"	1887	666
"	1888	703
"	1889	797
"	1890	858
"	1891	898

These two tables show clearly the continued growth of the school. With additional schools including eighth grade work, the increased numbers coming to the High School must be more and more marked. All this seems to emphasize what is said below concerning the need of additional accommodations for the school.

The tables on pages 84 and 85 show the enrollment by classes and courses of study for each semester of the year.

Owing to a change in the rule for grading made a year ago, an unusually small number were enrolled in the twelfth grade. A student, to be enrolled in the A Class of this grade, must have all his work completed, without conditions, through the preceding classes. Accordingly, the number enrolled in this class is often smaller than the number graduated. Under the old rules or lack of rules for grading, many special students obtained the credit of being Twelfth Grade students who had done only a small part of the work required of regular students. The injustice of this is obvious. Of course, for a time after the enforcement of the present rules for grading, there was an apparent falling off in this grade. This will gradually change as students become adjusted to the new rule.

Appended to the table on page 85 is the number of graduates for the year 1890–91. The classes for next year will be much larger. It is probable that the number will reach 100, thus exceeding the largest number ever graduated in one year.

The tables on pages 86 and 87 are worthy of careful study. The first shows the number of students in the various branches of study in the High School. The second shows the actual number of recitation sections found in the various branches. It will be seen that the number in almost every subject is considerably larger for the second semester than for the first, while the number of sections remains practically the same. This means simply that classes already large enough or too large are necessarily overcrowded by the added numbers. That this thing will continue, we cannot doubt. The obvious remedy to be suggested is an increase of the teaching force. This is very easy to suggest but, beyond certain well-defined limits, difficult of execution. The Board of Education has added one teacher to our corps for next year, and in the place of Miss Bushee, who taught but half time, has appointed a teacher for the full session. This makes possible an addition of nine recitation sections for the coming year. This will barely suffice for the first semester, and almost certainly will be inadequate for the second. Another teacher might be added then, but the problem of room seems insoluble. As it is, I hardly see my way clear to arrange the work for the first semester so that all the classes can be heard in the building. There would actually be no place for another teacher. And there is no further room available in the building, except in the Supervisor's offices in the basement. While these might be given up to High School use, the arrangement would be as bad as can well be conceived, as the additional room is most needed for the ninth and the tenth grades, the former of which is on the second, and the latter on the third floor of the building.

RESULTS OF "RECOMMENDATION" SYSTEMS.

The table on page 88 also serves to show the growth of the school and to emphasize what is said below concerning

TABLE OF MEMBERSHIP IN THE HIGH SCHOOL BY CLASSES AND COURSES OF STUDY. COMPLETE ENROLLMENT FOR FIRST SEMESTER OF SCHOOL YEAR OF 1890-91.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH.			COMMERCIAL			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	14	2	16	31	41	72	30	7	37	23	106	129	16	4	20	3	1	4	117	161	278
9 A	10	9	19	21	29	50	17	7	24	21	60	81	12	2	14	....	....	....	81	107	188
10 B	5	3	8	15	30	45	9	6	15	10	34	44	10	1	11	5	7	12	54	81	135
10 A	9	1	10	8	8	16	9	3	12	9	35	44	5	2	7	2	10	12	42	59	101
11 B	7	3	10	9	15	24	6	....	6	4	27	31	1	....	1	7	4	11	34	49	83
11 A	7	2	9	6	3	9	4	2	6	13	24	36	1	2	3	1	4	5	31	37	68
12 B	3	....	3	6	5	11	1	....	1	1	24	25	2	2	4	1	2	3	15	33	48
12 A	....	....	....	1	4	5	....	....	....	3	8	11	....	....	....	....	....	....	4	12	16
P. G.	....	....	....	2	3	5	....	....	....	2	9	11	....	....	....	....	....	....	4	12	16
Total	55	20	75	99	138	237	76	25	101	86	326	407	48	13	61	18	27	45	378	548	926
Graduated	....	....	....	1	6	7	....	1	1	4	13	16	....	....	....	....	....	....	5	19	24

TABLE OF MEMBERSHIP IN THE HIGH SCHOOL BY CLASSES AND COURSES OF STUDY. COMPLETE ENROLLMENT FOR SECOND SEMESTER SCHOOL YEAR 1890-91.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH.			COMMERCIAL.			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	7	5	12	34	42	76	24	2	26	31	92	123	26	5	32	5	4	9	129	180	279
9 A	16	....	16	23	35	58	19	10	29	14	56	70	10	1	11	3	4	7	84	107	191
10 B	10	6	16	23	26	49	8	5	13	14	40	54	11	2	13	6	8	14	72	87	159
10 A	4	5	9	10	10	20	5	4	9	11	31	42	6	1	7	4	10	14	40	61	101
11 B	5	2	7	10	10	20	2	3	5	8	19	27	4	2	6	2	5	7	31	41	72
11 A	9	2	11	6	10	16	4	....	4	2	30	32	....	....	....	....	4	4	21	46	67
12 B	9	2	11	7	2	9	5	2	7	10	20	30	...	2	2	2	1	3	33	29	62
12 A	1	..	1	4	3	7	1	..	1	....	16	16	2	2	4	...	...	....	8	20	28
P G	1	....	1	1	6	7	....	1	1	1	4	5	.. ..	...	.. ..	...	....	.....	3	11	14
Total	62	22	84	117	145	262	68	27	95	91	307	398	61	15	76	26	36	58	421	578	973
Graduated	1	....	1	6	3	9	2	1	3	4	18	22	2	2	4	....	....	.....	15	24	39
Total graduates for year	1	....	1	7	9	16	2	2	4	8	30	38	2	2	4	....	....	.....	20	45	65

TABLE SHOWING NUMBERS IN EACH BRANCH OF STUDY IN THE HIGH SCHOOL BY GRADE AND CLASS FOR BOTH SEMESTERS OF THE SCHOOL YEAR OF 1890-91.

STUDIES.	9 B.		9 A.		10 B		10 A		11 B		11 A		12 B.		12 A.		Total.	
	First Semester.	Second Semester	First Semester	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester
Algebra	308	290	184	252			73	80							25	†20 8	592	630
Arithmetic					95	98											95	98
Book keeping					33	16	7	17	6	5					0	0	46	38
Botany							61	62									61	62
Chemistry											49	56					49	56
Commercial Law													0	11			0	11
English	340	250	*89 / *78	90 / 105	5	76											464	567
English Literature									71	85	31	25	9	9			111	79
French									22	16	13	16	17	18	19	9	71	83
Geometry							54	56	69	73	66	78			21	17	210	226
German									53	50	25	44	23	23	20	35	121	155
Greek									18	6	11	19	4	10	0	3	33	37
History					137	141	74	103	76	69	55	61	32	39			373	413
Latin	130	137	97	107	80	81	39	34	40	25	30	45	7	17	10	8	353	457
Physics			75	77									80			100	155	177
Physiology	147	158															147	158
Psychology															14	23	14	23
Reading	240	238	142	103	26	84	26	52									446	510
Rhetorical Work	223	204	137	177	108	135	71	84	80	62	42	56	39	56	30	35	745	809
Trigonometry															0	8	0	8
Zoology					61	68											1 9	68

*The upper figures is for English (9) and the lower for 2 a 1.
†The upper figure is for Algebra (4) and the lower for 4a.

TABLE SHOWING NUMBER OF CLASSES IN ALL STUDIES OF THE HIGH SCHOOL FOR BOTH SEMESTERS OF THE SCHOOL YEAR OF 1891.

STUDIES.	9 B.		9 A.		10 B.		10 A.		11 B.		11 A.		12 B.		12 A.		Total.	
	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester	First Semester.	Second Semester
Algebra	10	9	8	9	.....	.....	3	3	.....	.....	.....	.....	.....	.....	1	†1	22	23
Arithmetic	.....	.....	.....	.....	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	4
Book-keeping	.....	.....	.....	.....	1	1	1	1	1	1	.....	.....	.....	.....	.....	.....	3	3
Botany	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	3	3
Chemistry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	2	2
Commercial Law	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	1	.....	.....	0	1
English	9	9	*3 *3	3 3	3	3	.....	.....	0	0	.....	.....	.....	.....	.....	.....	18	18
English Literature	.....	.....	.....	.....	.....	.....	.....	.....	3	2	1	2	1	1	.....	.....	5	5
French	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	1	1	1	1	3	4
Geometry	.....	.....	.....	.....	.....	.....	3	3	4	3	3	4	.....	.....	.....	.....	10	10
German	.....	.....	.....	.....	.....	.....	.....	.....	2	2	2	2	1	1	1	1	6	6
Greek	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	1	1	0	1	3	4
History	.....	.....	.....	.....	5	5	4	4	3	3	2	2	2	2	.....	.....	16	16
Latin	5	5	4	4	3	3	2	2	2	1	1	2	1	1	1	1	19	19
Physics	.....	.....	3	33	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	6	9	9
Physiology	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	6
Psychology	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1
Reading	7	7	6	6	1	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	16	16
Rhetorical work	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trigonometry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	1	0	1
Zoology	.....	.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3
Total	37	36	27	28	20	21	‡15	‡16	17	14	13	16	13	8	5	13	150	153

*The first figure is for English (2) and the second for (4 a.)

†The first figure is for Algebra (4) and the second for (4 a.)

‡In the 10 A, the Algebra coming the first 15 weeks and the Geometry the last 5, count as but one study in determining number of classes me is true of Algebra (4 A) and Trigonmetry (1) in the 12 A., each continuing half a semester.

TABLE SHOWING BY GRADES AND CLASSES THE WHOLE NUMBER ENROLLED IN THE HIGH SCHOOL, AND THE NUMBER GRADUATED FOR EACH SEMESTER OF THE PAST NINE YEARS.

TERM ENDING.	9 B.	9 A.	10 B.	10 A.	11 B.	11 A.	12 B.	12 A.	Special.	P. G.	Total.	Graduated.	Graduated. Total for Year.
January, 1883.....	119	117	86	62	51	45	59	25	37	9	630	28	
June, 1883.....	153	97	70	61	44	45	37	54	100	12	673	40	68
January, 1884.....	131	104	86	54	43	35	48	30	68	15	614	29	
June, 1884.....	116	103	66	65	43	27	28	48	110	9	614	47	76
January, 1885.....	160	86	63	70	62	28	24	28	73	8	602	24	
June, 1885.....	195	119	96	76	40	68	28	31	23	12	688	24	48
January, 1886.....	181	110	109	67	67	44	45	30	28	16	687	17	
June, 1886.....	181	121	101	85	63	50	40	43	28	13	725	35	52
January, 1887.....	176	108	86	89	81	37	43	34	23	8	685	29	
June, 1887.....	168	126	83	76	91	56	27	44	24	17	712	34	63
January, 1888.....	160	114	75	70	77	63	48	29	27	11	674	24	
June, 1888.....	206	107	87	76	56	63	62	43	41	14	755	36	60
January, 1889.....	228	137	87	61	73	45	56	49	25	14	775	43	
June, 1889.....	236	137	110	77	66	54	39	56	29	27	831	51	94
January, 1890.....	249	158	112	87	75	44	59	33	0	17	834	31	
June, 1890.....	276	153	147	102	82	52	61	16	0	10	899	36	67
January, 1891.....	278	188	135	101	83	68	48	16	0	16	935	24	
June, 1891.....	279	191	159	101	72	67	61	28	0	14	973	39	63

the benefit of the present plan of entering from the grammar schools without examination.

Several things are to be noted. Looking at the 12 A Class, there seems to have been but little growth in the school, and really a falling off in the past few years. It should be said that since June 1889, no specialists have been enrolled in this class. With the new rules for grading adopted at this date, students could not be enrolled here without having done, without conditions, work equivalent to all the required work of preceding classes. It will be seen that while this class is recorded as 16 for June, 1890, 36 really graduated. This simply means that 20 of the graduating class, had some flaw in their records that prevented grading with their proper class. Under our present rule for grading, it will always be true that some will be graded below the class with which they will graduate. Under the old system, students were graded wherever the greater part of their work might be. Grading was no indication of work done, as it is at present. In January, 1888, students were for the first time admitted to the High School on recommendation. The record for the June term shows the gain. The number enrolled in this class was, for this term, 206. Next term, January '89 they are to be looked for in the 9 A Class, and we find a class of 137, a gain of 30 over the preceding term, and eleven more than had been enrolled in the class during the period covered by this report. For the term ending June '89, we find them in the 10 B, numbering 110, a gain of 23 over the preceding class, and larger than any preceding class. This continues as follows: 10 A, 87; 10 B, 82; 11 A, 67; 12 B, 62; which is, considering our stricter rules of grading, the largest class ever enrolled in the B Class of the Twelfth Grade.

Running through the table with classes that have since

entered, we find that, while the 9 B Class never before 1888 numbered more than 195, and its average membe during the previous 11 terms was 159, and for the pre 7 terms 174 3-7, its average membership for the 7 since the change has been 250 2-7, while for the past 3 it has not been below 276.

Taking the 9 A Class we see that the results o change were felt in the term ending January, '89. Its bership was 137 as contrasted with 107 for the previous For the six terms before, its average membership wa while for the six since its average has been 164, and th term has numbered 191.

In the 10 B. Class, we find the same state of a The first class in the new system reached this grade term of June, '89. For this term it numbered 110 as trasted with 87 in the same grade the term before. Fc five terms before, the 10 B. Class averaged 83 3-5, whi the five since it has averaged 132 3-5, and for the past has numbered 159.

In the 10 A., the change was felt in the term of ary, '90. For this term the enrollment was 87, as cont with 77 for the term before. It was in this term th new rule for grading went into effect, or the difference v be more marked. For the previous four terms the av enrollment was 71, while for the four since it has been and for the last two 101 each term.

In the 11 B. the results of the change appeared i term of June, 1890, when the class numbered 82, as trasted with 75 for the term before. For the previous terms the average enrollment was 71⅓, while for the since it has been 78⅔. The effect of the new rul grading is especially to be noted here, as before its ad many students were enrolled in the grade who had not

pleted all the work of previous grades. For the past four terms a student must have completed an amount of work equivalent to all the work of the Ninth and Tenth Grades, in order to be enrolled as a member of Eleventh Grade; and this, too, whether he be a regular or a special student. For the 11 A. the change has shown its effects for the two terms of this year only. The class has numbered 68 the first term, 67 the second term as contrasted with 44 and 52 for the terms of the preceding year. For the 12 B. the effect of the change is seen for the past term only. It would be unsafe to base any conclusion on this term's enrollment. The facts stated seem to prove that the changed system of admission to the High School tends to cause a rapid growth in the school. Of course the growth of the city is also to be taken into account, but the city has been growing just as rapidly in the past, while there has been comparatively little growth in the High School for some years before this change. This was due to several causes, one of which was the unquestioned improvement of the school for the years immediately preceding this change, (which were also years preceding my own coming into the school,) and the constant elevation in the requirements for admission as well as for graduation. But the growth for the past four years is very obvious. It might be easy to suppose that the new system would tend to lower the standard of the school. This is not true. The recommendation of teachers ought to be a better test of fitness than a singe examination given by strange teachers under a plan that is made by the rules laid down by the Board, an iron-like and unbending machine. It is, I am sure, a better test. But even if, through the errors of judgment of a teacher or two, children do get in the school who are not ready for it, they can not soon pass beyond the 9 B. Class. There has certainly been no lowering of the

standard here. But we see that the growth continues through all the succeeding classes ; and that, too, in spite of the fact that absolute rules for grading, which are never varied from, render it more difficult than formerly to rank in higher classes. I have no doubt that an explanation in part for this growth is found in the closer relations that now exists between the grammar schools and the High School. While children might pass the dread ordeal of the examination to the High School, many were doubtless deterred by entering the school from the very impression conveyed by the examination and the feeling that the High School was something apart from the other schools. Many, too, failed on examination once or twice and then left school, not to return. Now, many are sent to us on recommendation who have been two or more terms in the 8 A. Class and have brought their work to the required standard. There ought to be a place for such students here so long as they are faithful and industrious. Many of them fail in part of their work, but we can adapt the work to the capacity of such students by excusing them from one study. It is certainly better for them to have a year or two, or more, of the High School with partial work than to end their education with the grammar schools. This is possible, while we in no way lower our standard ; for, if a student cannot take all of the work successfully, he can often do well in two or three of the studies of a class.

DEFICIENT PREPARATION.

We have always found the work of the B Class of the Ninth Grade a serious problem. Children come to us from many schools, with necessarily varying discipline, all of which have two sessions a day. They find at once that now they have their afternoons free from school. Many fail

hrough not realizing that a regular part of these afternoons nust be given to study. Then, too, they come with very ll-formed habits of study. They have not the strength to tand on their own feet. They need more help than chil-lren, after eight years of school, ought to need. It would e ungracious for me to seem to criticise the work of lower grades ; and nothing can be farther from my purpose. But s it not possible that our pupils might be better prepared for he High School if they did not have so much work to do o prepare? This may sound paradoxical, but I am firmly convinced that most of the trouble that we find comes from so much being demanded of the children by the course of study that teachers are compelled, in order to cover the re-quired ground, to cram their classes with a surface knowledge of things often beyond them, rather than to educate them into habits of self-reliance and of thinking for themselves. I am sure that we should have better mathematicians if much of he Arithmetic now crammed into unreceptive minds were eft out ; and if on simple work adapted to their immature easoning powers, enough work was demanded to ensure absolute accuracy. Certainly, absolute accuracy in funda-nental operations is of more practical importance to any boy eaving school with the grammar schools than a superficial and, as it generally is, entirely worthless knowledge of ntricate applications of percentage, proportion, or square oot. I am confident that a large part of the failure in Algebra in the first year's work in the High School comes from the fact that reasoning powers are absolutely stunted by unwarranted arithmetical demands, and that habits of inaccuracy are fostered by the vain struggle to master tasks beyond the mental development of the average child of the grammar school age. It is certain that too many fail in the first term's work in Algebra, and it is just as certain that

this work does not compare in absolute difficulty with the work of the Eighth Grade in Arithmetic. I think it may be asserted as an indisputable fact that any student who has the mental ability to do in a genuine way (without having the work done for him) the work in the Arithmetic of the A, Eighth, ought to be able to do with little difficulty the work of the B, Ninth in Algebra.

The difficulty spoken of is not confined to mathematical work, but is perhaps most emphasized here, as this branch of study is worthless without independence and self-reliance, as its very essence is accuracy in details. Without this accuracy mathematics is not mathematics, and no arithmetic at all is better than arithmetic that does not have for a large part of its aim the cultivation of accuracy.

ADMISSION TO THE HIGH SCHOOL.

Up to January, 1888, all students from the grammar schools were obliged to take an examination at the High School building for admission to the school. At that time a modification of the plan was introduced, and now the large majority of those that enter the High School come from the grammar schools without an examination on the basis of good work in the grammar schools. While the present plan is far from perfect, it is doubtless better than the old one. At present students come from some schools on recommendations who could not come from other schools. A greater uniformity of standard would be a great gain. Furthermore, many students now doubtless enter the school on "recommendation" who, under the old plan, might not be able to pass the examination at all. This is natural, and it is right. Many remain two or three terms in the Eighth Grade, and at last bring up their standing to the point to bring them to the High School. Beside these some students

are possibly "recommended" who really ought not to be so recommended, but I have no reason to believe this a general fault.

As has been shown above, the rapid growth of the High School dates from the time of the adoption of the present plan of admission. Undoubtedly many do enter who would not have come under the old system. Many come who are not prepared for full High School work, but after they have got all they can from the grammar school course and can profit by work here. That the best results may be obtained we should have an understanding of these children from the start. If it has taken a boy two or three terms to complete his "A. 8th" work, it is unreasonable to suppose that he can do his "B. 9th" in one term. If, then, we knew of all such cases; as soon as signs of weakness were shown, we could have them drop one study and give them some chance of doing their other work successfully. Some grammar school teachers have objected to giving this information, on the ground that it is unfair that we should be prejudiced concerning children. But, strange as it may seem, the teachers of the Ninth Grade are trying to consider the welfare of the children who come to them. If by a knowledge of his characteristics in advance we can secure to a weak student partial success, rather than the absolute failure that must come from his trying to do what he is incapable of; certainly it is worth while for us to have the knowledge asked for. The present plan of admission to the school would be much better in its working, not as affecting the mere machinery of administration, but as affecting the individual student, if we could be informed of all cases of students who have been obliged to repeat Eighth Grade a second or a third time.

I should greatly regret a change to the old system of examination, but it is to be said that by it, and by making

these examinations of a very rigid character, we might possibly make the present school building serve for several years to come. In other words we might make the school "high" as to crowd out children of mere ordinary ability. I think, however, that few will consider this an entirely satisfactory solution of the problem of "more room needed."

LIGHTENING OF WORK IN NINTH GRADE B CLASS.

During the past winter we have tried an experiment in the work of the Ninth Grade, B Class, that we hope will do much to bridge the gap between the grammar schools and the High School. Instead of giving each of four subjects five times a week, each is given four times, thus making sixteen recitations weekly, besides one meeting for rhetorical work, instead of twenty. Our plan is as follows: We have six recitation periods. On Monday all the recitations of the B class in the second period are omitted, on Tuesday all of the third period, on Wednesday all of the fourth, on Thursday all of the fifth, and on Friday all of the first and sixth. The programme is so arranged that very few have recitations on both the first and the sixth period, so not more than one recitation a day is omitted by any one student. The teachers all have one vacant hour each day. Members of their classes who are weak in their work may go to them voluntarily or may be required to go to them for needed assistance on these days. This assistance must often consist in showing students how to prepare their lessons and in suggestions as to methods of study. It will not consist in doing for students what, by a little guidance, they can learn to do for themselves. We hope by another term's trial of this plan to accomplish much better results than we have heretofore been able to do.

RELATIONS WITH PARENTS.

During the past year a more careful attention has been

given to the notification of parents of poor work by students. The results have been generally satisfactory. For the most part parents are anxious to co-operate with us in receiving good work and attention to duty on the part of their children. Occasionally, but fortunately rarely, we come across one of the sort who does not care to be "bothered" with the school work of his children. Such a one generally unconsciously confesses his own incompetence to manage his children, and still thinks it strange that the influence of the school cannot reach out and compel attention to duty during afternoon study hours at home. It is often urged that the public school system tends to lessen parental responsibility. If this is really true it is a striking objection to the system, If parents are unable to govern their children at home it is not strange that teachers sometimes fail to receive the best results at school. The two influences, the home and the school should be exerted in perfect harmony to develop industry and independence of character.

D. H. S. ALUMNI SCHOLARSHIP.

During the past year the Alumni Association of the High School has taken action that cannot fail to be of great importance to the school. By means of the unusually successful annual meeting of the Association, a nucleus of a fund was obtained for the founding of a scholarship in the University of Michigan, for graduates of the High School. This sum has been largely increased by subscription, and it is practically certain that at least one recent graduate of the school will be sent to the University by it this fall.

The scholarship is controlled by a Board of Trustees, one half of whom are chosen by the Alumni Association and one half by the subscribers to the fund.

The following constitute the Board for the present year :

DEXTER M. FERRY, Chairman,
OCTAVIA W. BATES, Secretary,
WALTER S. HEAVENRICH, Treasurer,
CHARLES H. JACOBS.
HENRY A. CHANEY,
WILL R. ANTISDEL.
The Principal of the High School, *ex-officio*.

The awarding of the scholarship or scholarship is entirely in the hands of the Board of Trustees. It will depend solely upon merit. It will be confined to students whose work has been of high rank in the High School and whose character is above reproach. At present the limit of a scholarship is $250 a year. This is given as a loan without interest until one year after graduation or permanently leaving the University, after which a nominal interest will be charged. Certainly the plan is one that must secure the interest of all. It cannot but be an incentive to some students of moderate means to remain in the High School until the end of their course, with the hope of obtaining a college education. Many, seeing no prospect of the higher education, leave the High School after two or three years' attendance, to engage immediately in business pursuits.

RELATIONS WITH THE UNIVERSITY.

Our relations with the University are generally of a most satisfactory character. The large proportion of our students that go there take good rank from the start, and every year a larger proportion of our students here are turning their eyes collegeward. While it is far from the most important work of the High School to prepare students for college, a high school that did not recognize college pre-

paration as an important part of its work would fall far short of fulfilling its proper mission.

Graduates of our school are admitted to the University without examination on presentation of a special certificate of good work done here. Formerly a higher standard of work was required here in the University preparatory course than in the English and the commercial course. At present students are graduated in all courses if they have attained a standing in all the studies of their course of "fair," which is equal to about 75 per cent. on a percentage system of marking. At present, to receive a recommendation to the University a student must have attained a standing of "good," which equals about 82 to 90 per cent. in four-fifths of the work of the last two years of his course. A failure to receive this does not necessarily mean that a student will fail to enter the University. He might be able to enter on examination. It merely means that his work has not been of the high character that we must exact if we are to be responsible for saying that a student is prepared for satisfactory college work. Of course it is evident that we must disclaim all responsibility for such students as may, without graduation here, "cram up" for examinations without aid or by outside tutoring and receive admission to engineering courses of the University. I specify engineering departments, as the requirements for admission to these are so much lower than to other courses that students who wish to take a short cut to the University, and to obtain the credit of being college men, without having done the preparatory work that should be demanded of college men, naturally look to the engineering course as the easy road to college honors. It it needless to say that, once in the University, students of this sort find their path a thorny one, and that many stay for a short time. It is to be hoped for the credit of the University and the good of the high schools of the State that

the requirements for admission to these courses may be raised to the level or those for other courses.

From the calendar of the University for 1890–91 I learn that 71 *graduates* of our school have been enrolled in the various departments during the past year. Of these 58 were undergradute students in the Department of Literature, Science, and the Arts, and four were candidates for advanced degrees. In the preceding June the University conferred nine degrees upon graduates of this school. It is also of interest to know that the first holder of the Elisha Jones Classical Fellowship established by Mrs. Jones in memory of her husband was Herbert Fletcher De Cou, a graduate of the High School in the class of January, 1885.

RELATIONS TO THE CITY NORMAL TRAINING SCHOOL.

While graduates of the High School who have obtained good rank may be admitted to the University without examination, none can enter the Normal Training School without taking an entrance examination. It can hardly be that a higher standard is demanded for the school than for the University. It is the experience of the University authorities that students who enter from accredited high schools without examination are better prepared for college work than students who come upon examination. It ought to be true that students who have done such work in the High School as would give them the rank of "good" in four-fifths of it, should be prepared for successful work in the Training School, and it can hardly be doubted that a four years' test of their fitness is better than any single examination can be, however thorough. I would most earnestly recommend that hereafter graduates of the High School who are entitled to recommendation to the University be admitted to the Training School without examination. I am sure that the plan would greatly benefit both schools. Both

are parts of the city school system. Certainly there can be no reason why there should be a wider gap between these two than there is between the High School and the University.

ADDITIONAL ACCOMMODATION.

What has been shown above concerning the growth of the school serves to emphasize what has been said in my reports for two years past concerning the need of better accommodations for the High School. May I beg to call your attention again to the facts shown in the report for 1888–89 on this subject. Time has only served to confirm the conclusions reached at that time. The Board of Education should look to the ultimate establishment of three high schools in Detroit. Two would be little better than one, for no two locations can be found that would be accessible to all. Even worse than the present building, in its present undesirable location, would be two buildings located as was suggested last year. The only clue to the proper location of high school buildings is a study of maps of the city showing the enrollment in the seventh and eighth grades and in the High School. Especially suggestive should be the seventh and eighth grade enrollment, as where this is large and the ninth is small it is obvious that the remoteness of the High School may be the cause of the difference.

The city is not ready yet for even two High Schools. The division of the present eleventh and twelfth grades would be a positive calamity. It could not but result in a lowering of the standard of work somewhat. The expense would be relatively much increased. The expensive apparatus and laboratories used in these grades would have to be duplicated, and the teaching force for the two schools would be much greater than for the one.

The only proper way to build up the new schools is by far-sighted thought for the future. A school can be established in the part of the city that seems to need it most which shall include the ninth and tenth grades only at first; it even might be confined to the ninth for the first year, until a tenth grade had grown up there. For a while those who wish to go beyond the tenth grade could come to the central High School. After a year or two another such branch school can be established in another part of the city, and finally a third. These schools should be planned with reference to the future, and additions could be made to them afterwards until they grew into regular high schools with four grades, from the ninth to the twelfth. At first, if deemed wise, buildings could be used for seventh, eighth, ninth, and tenth grades, or for the three without the tenth.

For the present our old building can be used. I know it is not a popular course to advocate the continued use of this building for school purposes; but I am convinced that the soundest principles of policy and economy would urge its use for some years to come. No *one* school will serve so well in another location, and we are not yet ready for three schools, much less for two. I still think that money could be well expended in putting a third floor over the northern part of the present building. This would give us room for growth for several years to come, and a very small expense would go a great way. As pointed out last year, such an addition would enable us so to rearrange the classes, as to avoid the constant going up and down stairs necessary at present. Next term it will be necessary for ten classes from the tenth grade, to recite on the first floor, with two long flights of stairs between them and the assembly room, and for six to recite on the second floor. The constant going up and down stairs must be injurious to some, and it greatly complicates the arrangement of classes and the management of the building.

At any rate something must be done for relief in the immediate future. The present building will be crowded to its utmost capacity very soon. What this relief shall be rests with the Board of Education to decide.

FREDERICK L. BLISS,
Principal of the High School.

In concluding this report I desire to express my appreciation of the true and loyal support that has met me on every hand by the principals and teachers, and of the zeal and interest exhibited on all occasions in carrying out my wishes.

Also the pleasure it affords me to see the harmonious and friendly spirit that prevails throughout the entire corps. I also wish to express to the Board my sincere thanks for the courtesy extended to me.

Very respectfully yours,
W. E. ROBINSON,
Superintendent Schools.

PENDIX TO REPORT OF SUPT. OF SCHOOLS.

OUTLINE OF THE COURSE OF STUDY

FOR

PRIMARY AND GRAMMAR GRADES.

B CLASS. FIRST GRADE.

LANGUAGE.—Oral lessons in Teacher's Edition of Mrs. nox's Elementary Lessons in English, pp. 19-25, inclu- e.

SPELLING.—By sound and by letter, the words in read- g lessons; also teach the use of the words.

READING.—Forty pages of chart and XV lessons of ational First Reader, with familiar words in sentences on e blackboard. A large amount of supplementary reading n be obtained from exercises in applied work in numbers.

NUMBERS.—By means of objects, all combinations from to 7, inclusive. Counting objects to 50, and Roman nota- n to eleven.

See detailed course in numbers.

WRITING.—Slates of proper size ruled with slate rulers; ncils long and well sharpened; correct position of body, et and arms, with pencil pointing over right shoulder, and rist up from the desk.

First two weeks.—Thorough drill upon simple exercises secure freedom of motion and control of the pencil.

Make the letters i, u, w, n, m, v, x, o, e, c, a, two spaces high, and r, s, two and one-half spaces high in first practice. Complete alphabet of small letters by the close of the twelfth week. Begin writing words as soon as enough letters have been learned to make a word. Do not allow children to write words in which there are letters that have not been given in a writing lesson. Take up the capitals at the beginning of the thirteenth week, in groups, as follows: O, D, C, E, A; N, M, H, K; I, J; X, W, Z, Q; V, U, Y; T, F, P; S, L, G; B, R.

Use counting exercises when they are helpful.

Allow no careless work at any time.

Time for lesson, twenty minutes, daily

Music.—Scale and interval drill; rote songs for recreation and to establish a proper use of the voice. For interval drill see Veasie's Primer. For rote song select those of high rather than low pitch.

Drawing.—After pupils have become familiar with terms of place, as, left, right, upper, lower, centers of sides, upper l. hand corner, upper r. hand corner, etc., form lessons from the sphere, cube and cylinder developing surface, point and line should be given, as shown in Primary Manual, pp. 30-38.

The drawing in this class is to be done both on slates and blackboard.

Teach expression of form in three ways: by Making, by Drawing, and by Language.

Combinations of splints into simple figures should be practiced weekly after drawing begins, using some of the exercises for object lessons.

Lessons in clay modeling should be given weekly in connection with the form lessons from solids.

The square and circle may be modeled in bas-relief upon clay tablets.

For order of work refer to Primary Manual, pp. 30-68. Daily lessons of twenty minutes each.

A. CLASS. FIRST GRADE.

LANGUAGE.—Review B. Class course, and in advance take pp. 26 to 33, inclusive, of Mrs. Knox's Elementary Lessons in English.

READING.—National First Reader and the chart completed. Prepare a variety of lessons for supplementary reading on blackboard and paper, using familiar words that will develop intelligent reading. All new words in each lesson should be placed upon the blackboard and thoroughly mastered before the lesson is assigned for reading.

SPELLING.—Spell all words in the reading lessons orally and in writing, and teach their use.

NUMBERS.—Review B. Class course, and in advance, by means of objects and by applied examples, master all combinations from 8 to 13, inclusive. Count objects to 100; Roman notation to twenty-five.

See detailed course in numbers.

WRITING.—Perfect position at desk whenever any writing is done. Slate always in position with pencil pointing over the right shoulder.

First two weeks thorough drill upon simple exercises with counting. Count fast enough to secure a good, easy writing motion.

Review small alphabet first six weeks, drilling upon such capitals as are needed in the regular work.

Begin review of capitals in seventh week.

Write words and sentences beginning with capitals.

Allow no capitals used, in any work, different from those given in the writing lesson.

Use blackboard freely. Teachers should never allow themselves to do any careless work upon the boards at any time.

Time, twenty minutes daily.

MUSIC.—Scale and interval drill.

Time—Children should be taught to beat the time. Two, three and four part measures, having one note for every measure.

Rests.

Simple staff exercises, mostly in key of G. Teacher to report the number of pupils who can sing the scale and those who cannot.

DRAWING.—Teach expression of form by Making, by Drawing, and by Language.

Clay modeling of type forms and simple objects based upon them to be practiced weekly.

Attention to paper folding.

Combinations of square, circular and triangular tablets into decorative forms.

Drill exercises in free movement of hand and arm to precede each lesson.

The work of this grade is to be done on paper and blackboard. One-fifth of pupils should work at blackboard each day.

Order of lessons in Primary Manual, pp. 68-100.

Daily lessons of twenty minutes each.

B. CLASS. SECOND GRADE.

LANGUAGE.—Review the First Grade course, and in advance, pp. 34 to 36, inclusive, of oral lessons from Teacher's Edition of Mrs. Knox's Elementary Lessons in English.

SPELLING—Spell all words in reading lessons orally and in writing, and define them.

READING—National Second Reader to page 86, with supplemental reading from matter corresponding to the First Grade work.

NUMBERS—Review all work of previous classes, and in advance, by means of objects and applied examples, master all combinations from 1 to 18, inclusive; then apply this knowledge to subtraction.

Read and write numbers to 1,000; Roman notations to correspond with reading lessons.

See detailed course in numbers.

WRITING—Perfect positions. Correct pencil holding. Show the exact position of hand, fingers and pencil and insist upon every one doing this part of the work.

Practice book No. 1; lead pencils, (Faber's No. 3 or Dixon's M).

First two weeks of term use simple drill exercises, giving more attention to position and pencil holding and free movement than to the exact forms of letters. Do not allow any careless work at any time. Use blackboard freely. Send a portion of the class to the board each day. Criticise the work on board. Ask pupils to criticise one another's work. Review small and capital letters in words and sentences.

Write specimens at beginning of each month, keeping first one written to compare with last. Send others home.

Time, twenty minutes daily.

MUSIC.—Interval practice continued. Exercise pupils daily in practice upon the ladder and with manual signs in key of C or D. Teach the pitch names, a, b, c, d, e, f, g.

A few more simple varieties of two, three, four and six

part measure. Exercise from the staff to illustrate what is known of time and tune.

DRAWING.—Teach expression of form by Making, by Drawing and by Language.

Clay modeling, tablet laying and paper folding as directed by special teacher.

Careful attention to the analysis of form. Drill exercises in free movement to precede each lesson.

Lines of definite lengths carefully considered.

The drawing of this class to be done on blackboard and paper. One-fifth of pupils working at blackboard each day.

Order of work given in Primary Manual, pp. 107 to 167.

Daily lessons of twenty minutes each.

A CLASS. SECOND GRADE.

LANGUAGE.—Review course of previous classes.

Advance work:—Oral lessons from Teacher's Edition of Mrs. Knox's Elementary Lessons in English, pp. 33 to 36, inclusive.

SPELLING.—Spell all words in reading lessons orally and in writing, and define them.

READING.—National Second Reader completed. Supplemental reading from matter corresponding to First Grade work.

NUMBERS.—Review work of previous classes. Make all possible combinations of two figures under 100. Column addition of four figures only, using the digits 1, 2, 3, 4 and 5. Read and write numbers to 10,000. Multiplication table to 36 as a multiple. The idea of fractions developed. Roman notation to correspond with reading lessons.

WRITING.—Practice-book No. 1; lead pencils, Faber's o. 3 or Dixon's M.

Blackboard work and specimens same as Class B.

First two weeks of term use drill exercises; do but tle work upon letters. Get everybody ready for work. eview both alphabets in words and sentences. We are ow getting ready for pens and ink, and very careful tention should be given to *position*, *pencil holding* and eedom of movement.

Allow no careless work at any time.

Time, twenty minutes daily.

MUSIC.—Review the work of the preceding classes. A tle more advanced work upon the staff. Position of do keys of C, D and G, recognized in modulation.

DRAWING.—Teach expressions of form by Making, by rawing and by Language.

Paper cutting and pasting.

Paper folding and tablet laying continued. Clay moding as directed. Careful attention to free movement.

No. 1 Drawing-book, with accompanying Manual, to e used in this grade.

Daily lessons of twenty minutes each.

B CLASS. THIRD GRADE.

LANGUAGE.—Lesson 1 to 18, inclusive of Hyde's ractical lessons in English.

SPELLING.—Define all new words in reading lessons, nd spell them orally and in writing.

READING.—National Third Reader to p. 116. Supplemental reading from selections corresponding to second rade work.

NUMBERS—Review work of previous classes. Con-

tinue column addition of four figures. Read and write numbers in two periods.

Roman notation to correspond with reading lessons.

Subtraction without carrying.

Multiplication table treated exhaustively through 72 as a multiple.

Multiply any number consisting of two periods, first by 2; then 22, 222, 2,222, then by 3, 4 and 5.

Short division including carrying.

Table of Denominate Numbers.

12 in. make 1. ft.

3 feet make 1 yd.

2 pts. make 1 qt.

4 qts. make 1 gal.

Carry on work in fractions.

See Detailed course in numbers.

GEOGRAPHY.—Sections I to V, inclusive, of Detailed Course in Geography.

WRITING.—Practice Book No. 1; pen and ink.

First two weeks of the term use drill exercises. Watch carefully the penholding. Show all how to take ink. Have them take up pens and lay them down often in order to get them accustomed to the new instrument.

Blackboard work and specimens same as second grade. Review both alphabets in words and sentences.

Spelling lessons and all writing previously done with lead pencil to be done with pen and ink.

Time, twenty-five minutes daily.

MUSIC.—More difficult interval work; pupils to be able to tell readily the pitch names and the position of each pitch on the staff.

Modulation in keys of C, G, D and F. More varieties of time.

DRAWING.—Practical illustrations of the development form in work cut from paper, card board, cloth, wood, ap, leather, &c.

Paper cutting a class exercise.

Special attention to inventive work in design.

Familiar objects analyzed, naming geometric form upon nich they are based.

Drill exercises in free movement.

No. 2 Drawing-book, with accompanying Manual, to used.

Daily lessons of twenty minutes each.

A. CLASS. THIRD GRADE.

LANGUAGE.—Review previous course, and finish Part of Hyde's Practical Lessons in English.

SPELLING.—Define all new words in reading lessons, d spell them orally and in writing.

READING.—National Third Reader completed. Supementary reading from selections corresponding to second ade work.

NUMBERS.—Review work of previous class.

Selections from Robinson's Beginners Book in Arithetic suited to the capacity of pupils.

Column addition of not more than six figures in a colmn. Read and write numbers of three periods.

Multiplication table treated exhaustively through 100 as multiple. Multiply any number consisting of three periods y a multiplier not to exceed four figures.

Continue work in fractions.

Short division including carrying.

Tables of Liquid and Dry Measures, and Time and U. S. Money.

Abundant exercise in applied work—use statements.
See Detailed Course in Numbers.

GEOGRAPHY.—Section VI thorough study of Michigan.

WRITING.—Practice-book No. 1; pen and ink.

First two weeks of term use drill exercise. Watch carefully all work done with pen. Do not require too much miscellaneous writing. Avoid working too slowly in practice books or too rapidly when doing other work, as writing spelling lessons.

Specimens at beginning of each month.
Time, twenty minutes daily.

MUSIC.—In addition to the work of the preceding term, keys of C, G, D and E studied. Let the work be a developing process, and keep close relationship between lessons, each being a step in advance of the last. Begin two-part singing. The time should always be beaten steadily and the pupils know with which beat the commencing note of each phrase or section is to be sung.

DRAWING.—Continued daily attention to the analysis of form.

Reversed curves. Vase forms.
Paper cutting and pasting continued.
Attention to made work as directed.
Drill lessons in free movement continued.
Daily lessons of twenty minutes.
No. 3 Drawing Book, with accompanying Manual.

B. CLASS. FOURTH GRADE.

LANGUAGE.—Review previous course. Lessons 1 to 27, inclusive, of Part II of Hyde's Practical Lessons in English. Simple letter writing from dictation. Insist

pon the use of correct language in all lessons and in peech.

SPELLING.—Spell and define all new words in reading essons.

READING.—National Fourth Reader to page 149. Supplemental reading from selections corresponding to Third Grade work. Insist upon correct reading from all other text ooks used in this class.

NUMBERS.—Review work of previous classes.

Selections from Robinson's Beginners Book in Arithmetic, pp. 90 to 146, and other supplemental arithmetics. Arabic notation and numeration to 1,000,000,000. Multiplication table completed. Continue drill in rapid column ddition of six figures. Continue work in fractions. Abundant exercise in applied numbers in Addition, Subtracon, Multiplication and Division, (divisors not to exceed 30. -Use statements.

See Detailed Course in Arithmetic.

GEOGRAPHY —The World and Physical Geography of North America.

WRITING.—Practice-book No. 1. Copy-book No. 1.

First two weeks of term use drill exercise. Complete rst ten pages of copy-book by close of tenth week of term. Finish copy-book by close of nineteenth week of term. Mark each page of copy-book when the page is finished. Write three pages in practice book to one in copy-book.

Specimens at beginning of each month.

Time, twenty-five minutes daily.

MUSIC.—Review the work of the preceding classes.

Try to select exercises and songs to illustrate previous drill in tune and time. On page 4, boys and girls should

alternate in reading and singing the exercises; afterwards individual pupils should be called upon to sing them.

DRAWING.—Work the same as in Class A. Third Grade, with broader application and better expression of form.

A CLASS. FOURTH GRADE.

LANGUAGE.—Complete and Review Hyde's Practical Lessons in English, Continue simple letter writing; good form as to capitals and punctuation. Insist upon correct language in all lessons and in speech. It is not enough that pupils merely commit the rules to memory; see that they have a clear conception of their meaning.

SPELLING.—Spell and define all new words in the reading lessons.

READING.—National Fourth Reader to page 284. Supplemental reading, as directed.

NUMBERS.—Review work of previous classes.

Selections from Robinson's Beginners' Book in Arithmetic, pp. 146 to end, and other supplemental arithmetic. Continue drill in rapid column addition of six figures. Abundant practice in applied numbers in the four fundamental processes. Use statements. Continue work in fractions. Simple applied work in all tables of denominate numbers, except Apothecary's Weight and Surveyor's Measure.

Simple form of bills.

GEOGRAPHY.—Political Geography of North America, and review.

WRITING.—Practice-book No. 1; Copy-book No. 2.

First two weeks of term drill exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is ished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Time, twenty-five minutes daily.

DRAWING.—Simple and reversed curves compared and ntrasted.

Historic ornament introduced.

Paper cutting and made work continued with applica- n to daily lessons.

Drill exereises in free movement.

No. 4 Drawing-book, with accompanying Manual, to used.

Daily lessons of twenty minutes each.

MUSIC.—In addition to the work of the preceding term, e division of the beat introduced. Class should practice major scales. They should be able to sing chromatic ales.

CLASS B. FIFTH GRADE.

LANGUAGE.—Continue letter writting from dictation. essons 1 to 18, inclusive, of Reed & Kellogg's One Book ourse in English.

SPELLING.—Spell and define all new works in advance the reading exercise.

READING.—National Fourth Reader completed. ooker's Book of Nature, Part I. Supplemental reading, directed.

NUMBERS.—Review the four fundamental processes. hite's Complete Arithmetic to page 63, and simple

examples in Addition and Subtraction of Fractions, Denominators not to exceed 144. Obtain least common denominator by inspection. Omit L. C. M. and G. C. D. Thoroughly establish, by means of objects, the relation of a fraction to an integer. Use decimals in addition and subtraction.

GEOGRAPHY.—Section IX of detailed course.

South America completed.

Review previous courses.

WRITING.—Practice-book No. 2. Copy-book No. 3.

First two weeks of term movement drill exercises, using muscular movement, be sure that all get the free, easy use of the forearm.

Copy-book through page 10 by close of the tenth week—

Complete copy-book by close of nineteenth week.

Write three pages in practice-book to one in copy-book—

Mark each page of copy-book when the page is finished.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Pupils of this grade should understand the signatures of all the major keys. Pupils should be able to write correctly all scales. Test exercises page 167, 168, 169 Second music reader, beating time, Time names and singing. More varieties of time. Begin drill in steps and half-steps.

DRAWING.—Conventionalization of leaves.

Natural forms of leaves analyzed.

Lilac and quince leaf pressed and pasted on copy in drawing books.

Other leaves studied,

Working drawings begun.

Special attention to *facts* of form and simple objects nstructed according to plan.

Attention to original decorative work.

No. 5 Drawing-book with accompanying Manual, to be ed.

Daily lessons of twenty minutes each.

A CLASS. FIFTH GRADE.

LANGUAGE.—Lessons 19 to 36 of Reed & Kellogg's ne Book Course in English. Review previous courses. mple composition work in school; reproductions. Letter riting.

SPELLING.—Patterson's Common School Speller, benning with lesson XXXI, finish part II.

READING.—National Fifth Reader to p. 164, and ooker's Book of Nature, part II, as supplemental reading.

NUMBERS.—Review previous course. White's Comete Arithmetic, Continue work in Addition and Subtracon of Fractions, and include simple Multiplication and ivision of Fractions, also Multiplication and Division of ecimals. In Division of Decimals, place the quotient above e dividend and make the divisor a whole number. Omit view prob.—pp. 76, 77, 78, 79, 80 and 81.

Omitting Circulating Decimals and all puzzling and fficult examples. Give abundant simple practice in these bjects.

GEOGRAPHY.—Europe and review.

WRITING.—Practice-book No. 2, Copy-book No. 4.

First two weeks of term, muscular movement drill ercises.

Copy-book through page 10 by close of nineteenth eek.

Mark each page of copy-book when the page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Same as Class B. Also the class should be able to sing any piece in the Second Reader.

DRAWING.—Same as Class B, with broader applications of principles and better expression.

B CLASS. SIXTH GRADE.

LANGUAGE.—Lessons 37 to 52, inclusive, of Reed & Kellogg's One Book Course in English. Review previous courses. Continue composition work. Use Geography and other sources for material. Letter writing continued.

SPELLING,—Patterson's Common School Speller, Lesson I to XXX, inclusive. Do not rely upon the author's definition; illustrate the meaning by using the words in sentences.

READING.—National Fifth Reader to page 307. Supplemental reading from selections in Fourth Grade work.

NUMBERS.—Thorough review of Addition, Subtraction, Multiplication and Division of Common and Decimal Fractions, including L. C. M. and G. C. D. and U. S Money.

White's Arithmetic to page 112.

GEOGRAPHY.—Asia, Africa and review.

WRITING.—Practice-book No. 2; Copy-book No. 5.

First two weeks of term muscular movement exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of the nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—This class should begin third series of charts. They should be taught to know the intervals to the extent of major and minor seconds and thirds. Perfect and augmented fourths, and perfect and diminished fifths. Difficult modulation. Gradually introduce all varieties of time.

DRAWING.—Special attention to constructive drawing.

Direct application of working drawing, according to a scale, in boxes and geometric solids made of cardboard, wood, etc.

Perspective representation of cylindrical objects.

The appearance of the cylinder in different positions with regard to the eye, thoroughly understood.

The study of natural and conventionalized leaf forms continued.

Decorative design more broadly treated.

No. 6 Drawing-book, with accompanying Manual, to be used.

Daily lessons of twenty minutes each.

A CLASS. SIXTH GRADE.

LANGUAGE.—Exercise in Composition and correct speech and letter writing, continued. Reed & Kellogg's One Book Course in English Lessons 53 to 62, inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Finish Part III and through Lesson XXVII of Part IV.

READING.—National Fifth Reader completed, with selections from Fourth Grade work as supplemental reading.

NUMBERS.—Review Common and Decimal Fractions. White's Complete Arithmetic to page 135. Omit Apothecaries' Weight. Selections from other authors upon these topics.

GEOGRAPHY.—Oceanica and review.

WRITING.—Practice-book No. 2; Copy-book No. 6.

First two weeks of term muscular movement drill exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—A, E, B, minor scales. Chromatic scale—Practice singing accidentals.

DRAWING.—Same as Class B, with more independent work from pupils and broader application of principles.

B CLASS. SEVENTH GRADE.

LANGUAGE.—Exercise in composition, correspondence and correct speech. Reed & Kellogg's One Book course in English, Lessons 63 to 77 inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Lessons XXVIII to LXV, inclusive. Omit page 91.

READING.—Brief History of the United States, and the first fifteen chapters in Kellogg's First Book in Physiology and Hygiene. Each lesson in these subjects should be preceded by a clear and thorough explanation, and followed by such questions and talks as will insure a full understanding of the subject matter by the pupils.

NUMBERS.—Review Common and Decimal Fractions, Sixth Grade Course in General. White's Complete Arithmetic. Selections from other authors upon the subject, and Simple percentage, p. 185.

Omit Long and Time and Metric Systems.

HISTORY.—Brief History of the United States through the Revolutionary War according to Manual, Exercise pupils in writing a history of an event, or an epoch, in connection with language lessons.

WRITING.—Practice-book No. 2; Copy-book No. 7.

First two weeks of term muscular movement drill exercises.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy book.

Specimens at beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Review Sixth Grade work, and take a little in advance. Pupils shall acquire one additional song in each major key.

DRAWING.—The work of this grade should show a thoughtful application of the principles involved in Construction, Representation, and Decoration; to this end,

teachers should criticise the work of pupils but not direct each step.

Working drawings continued, increasing the breadth of their application.

Pattern work of Geometric Solids introduced and objects made both from patterns and drawings, according to a scale.

Drawing should accompany all made work, showing an intelligent application of the working drawing, in the construction of simple objects.

Facts and appearance of objects contrasted and compared.

Independent work from pupils in grouping models and objects.

Laws of plant life carefully studied for purpose of decoration.

Modification of plant forms in the construction of bilateral units for surface decoration.

Original work required.

No. 7 Drawing-book to be used.

Daily lessons of twenty-five minutes each.

A. CLASS. SEVENTH GRADE.

LANGUAGE.—Exercise in composition, etc., as before. Reed & Kellogg's One Book Course in English. Lessons 78 to 97, inclusive. Review previous courses.

SPELLING.—Patterson's Common School Speller. Finish Part IV and through Lesson XXV of Part V.

READING.—Brief History of the United States, and complete and review Kellogg's First Book in Physiology and Hygiene. Follow directions given in B. Seventh Course.

HISTORY.—Brief History of the United States, finished and reviewed.

NUMBERS.—White's Complete Arithmetic, page 185 to 222, Simplest forms of Stocks. Select examples from other authors, involving a review of the previous classes.

WRITING.—Practice-book No. 2.

First two weeks of term, muscular movement drill exercises.

Miscellaneous writing Notes, Receipts, Orders, Drafts, Checks, Business Letters, &c.

Specimens at the beginning of each month.

Give frequent tests of speed.

Time, twenty-five minutes daily.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

B. CLASS. EIGHTH GRADE.

LANGUAGE.—Exercise in Composition, etc., as before. Reed & Kellogg's One Book Course in English, Lessons 98 to 109. Review previous courses.

SPELLING.—Patterson's Common School Speller. Finish Part V.

READING.—Selections from Appleton's Fifth Reader. Supplemental reading.

GOVERNMENT.—Manual, as prescribed.

NUMBERS.—White's Complete Arithmetic, pp. 222 to 275, omitting Annual Interest, Present Worth, Exchange and Equation of Payments.

GEOGRAPHY.—From the beginning through North America.

WRITING.—Same as A, Seventh Grade.

MUSIC.—All major and minor scales understood. All difficulties in time understood at a glance. Three and four part singing. Drill in exercises still necessary.

DRAWING.—Independent and rapid work required. Free-hand work insisted upon in all of representation.

The work of the grade includes:

1st. Construction.

(a) Applied working drawings.

(b) Problems in Geometry. The work being instrumental.

2d. Representation. Cylindrical and rectangular objects placed at angles of 90 and 45 degrees to the eye of the observer.

Grouping of models and objects.

3d. Decoration. Analysis of plant growth in Historical ornament.

The study of plant life.

The adaptation of growth in nature, to the use of bilateral units and surface decoration.

Application of principles in original work.

Made work required, as directed.

No. 8 Drawing-book to be used.

Daily lessons of twenty-five minutes each.

A CLASS. EIGHTH GRADE.

LANGUAGE.—Exercises in Composition, Punctuation, etc., as before. Reed & Kellogg's One Book Course in English. Lessons 110 to 124, inclusive, and review of all courses.

SPELLING.—Patterson's Common School Speller. Review entire course.

READING.—Selections from supplemental reading.

NUMBERS.—White's Complete Arithmetic. Longitude and Time, Land, Ratio and Proportion, Involution, Evolution through Square Root, and applications, and review entire course in arithmetic. It is understood in these courses that only practical matter shall be selected, no puzzles should be assigned in any lesson. Select matter from any source practicably applicable to class and course.

GEOGRAPHY.—Subject completed.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

REPORT OF THE SECRETARY.

REPORT OF THE SECRETARY.

To the Board of Education:

GENTLEMEN:—Herewith I respectfully submit a report of the financial transactions of the Board for the year ending June 30th, 1891:

BUILDING FUND.

Balance July 1st, 1890		**$ 14,114 64**
Receipts.		
From City Bids	$ 1,250 83	
" **taxes, 1889**	30 64	
" " **1890**	55,574 22	
" **interest on daily balances**	790 47	
" **sale of old buildings**	258 00	
		57,904 16
Total		**$ 72,018 80**
Disbursements.		
Paid for real estate	$ 21,364 00	
" " **new buildings**	66,375 52	
" " **interest on overdraft**	31 73	
		87,771 25
Overdraft June 30th, 1891		**$ 15,752 45**

REPAIR FUND.

Balance July 1st, 1890	**$ 4,760 40**

Receipts.

From city bids	$ 256 94	
" taxes, 1889	6 30	
" taxes, 1890	24,217 15	
" interest on daily balances	23 33	
" temporary loans	10,883 72	
" primary school moneys	6,929 29	
		$ 42,316 73
Total		$ 47,077 13

Disbursements.

Paid for materials	$ 25,006 70	
" " labor	32,129 69	
" " interest on overdraft	208 18	
		47,344 57
Overdraft June 30th, 1891		$ 267 44

SALARY FUND.

Balance July 1st, 1890		$ 716 59

Receipts.

From city bids	$ 2,443 64	
" taxes, 1889	59 67	
" " 1890	268,734 00	
" primary school moneys	79,491 59	
" temporary loan	9,116 28	
" interest on daily balances	4,583 66	
		364,428 84
Total		$365,145 43

Disbursements.

Paid Superintendent, Clerk and Attorney	$ 5,420 00	
" Secretary and Clerk	3,242 66	
" Supervisor and Clerk	2,571 96	

Paid Teachers	$335,258 23	
" Janitors	31,701 05	
		378,193 90
Overdraft June 30th, 1891		$ 13,048 47

GENERAL FUND.

Balance July 1st, 1890		$ 22,622 65

Receipts.

From city bids	$ 342 76	
" taxes, 1889	8 60	
" " 1890	30,725 13	
" interest on daily balances	807 53	
" primary school moneys	9,333 50	
" miscellaneous sources	347 06	
		41,564 58
Total		$ 64,187 23

Disbursements.

Paid for supplies	$ 9,629 03	
" " fuel	15,617 66	
" " furniture	13,343 93	
" " printing and stationery	5,883 57	
" " rent	1,349 32	
" " census	2,124 53	
" " miscellaneous purposes	4,427 11	
" " loan to building fund	5,000 00	
		57,375 15
Balance June 30th 1891		$ 6,812 08

BOOK OF REFERENCE AND APPARATUS FUND.

Balance July 1st, 1890		$ 272, 91

Receipts.

From tuition fees, non-residents	$ 1,447 13	
" interest on daily balances	11 27	
		1,458 40
Total		$ 1,731 31

Disbursements.

Paid for supplies	$ 463 78	
" " printing and stationery	964 95	
" " apparatus	11 71	
" " rebate of tuition	22 80	
		1,463 24
Balance June 30th, 1891		$ 268 07

SECRETARY'S CONTINGENT FUND.

Balance July 1st, 1890	$ 200 00
Balance June 30th, 1891	$ 200 00

Detailed Statement of warrants drawn for the year ending June 30th, 1891.

BUILDING FUND.

Real Estate.

1756	Geo. B. Teeks, lot 128 Horton avenue	$ 700 00	
1757	Geo. B. Teeks, lots 129, 130, 131 and 132 Horton avenue	2,750 00	
1772	Michael Lambert, Canfield avenue lots	4,900 00	
1781	C. M. Rosseau, lots 3, 4 and 5 Fort street	13,000 00	
1820	John McLaughlin, surveying	14 00	
			$21,364 00

New Buildings.

Voucher.		
1677	Workmen's pay roll, new buildings	77 54
1678	A. McEnhill, 5th estimate, Newberry	144 93
1699	Daniel Lane, 5th estimates, Roberts	249 50
1680	P. J. Hayes, Inspector	21 00
1681	J. B. Mann's 3rd estimate, Roberts	523 27
1682	P. J. Hayes, Inspector	21 00
1683	E. Austin, Jr., 1st estimate, Roberts	844 00
1684	Calnon & Goodall, 3rd estimate, Dickinson	350 00
1685	Dickinson & Hood, hardware	24 03
1686	M. C. Martin & Co., 2nd estimate, Newberry	118 75
1687	George C. Oldfield, architect	80 20
1688	Jas. B. Palmer, 6th estimate, Dickinson	1,345 55
1689	P. J. Hayes, Inspector	21 00
1690	P. J. Hayes, Inspector	21 00
1691	Workmen's pay roll, new buildings	173 66
1693	George Hanley, 1st estimate, Newberry	734 35
1694	James Cornell, 1st estimate, Roberts	238 00
1695	M. C. Martin & Co., 2nd estimate, Dickinson	233 65
1696	Adam J. Orth, 1st estimate, Roberts	888 25
1697	J. B. Morris, 4th estimate, Roberts	442 00
1698	Dickinson & Hood, hardware	12 30
1699	Francis Hins, brick	148 50
1700	H. Heames & Son, sand and lime	102 55
1701	P. Dingemans, lumber	47 76
1702	Geo. C. Oldfield	62 90
1703	Workmen's pay roll, new buildings	209 20

Voucher.		
1718	Workmen's pay roll, new buildings	$ 265 90
1719	Detroit Cornice and Slate, Co., Cass	252 11
1720	F. Hins, brick	74 25
1721	H. Heames & Sons, sand	4 50
1723	Geo. C. Oldfield, architect	46 80
1724	Higgins & Taepke, paint	71 25
1725	DeMann Bros., lumber	140 12
1726	Dickinson & Hood, hardware	25 29
1727	W. H. Anderson & Son, blacksmithing	5 46
1728	Workmen's pay roll new buildings	305 68
1729	J. B. Palmer, extras, Dickinson	39 22
1730	A. J. Orth, extras, Roberts	42 47
1731	M. C. Martin & Co., 3rd estimate, Dickinson	191 25
1732	McDonald Bros.. & Co., 1st estimate, Dickinson	237 25
1733	P. J. Hayes, Inspector	21 00
1734	Workmen's pay roll, new buildings	358 57
1735	J. E. Bolles & Co., 2nd estimate, Dickinson	92 35
1736	E.Austin, Jr., 3rd estimate Roberts	293 75
1737	McClure & Elliott, 1st estimate, Roberts	100 00
1738	M. C. Martin & Co., 3rd estimate, Newberry	242 65
1739	Workmen's pay rolls, new buildings	299 82
1740	John B. Morris, 6th estimate, Roberts	1,783 50
1741	C. W. Restrick, lumber	22 81
1742	Geo. C. Oldfield, architect	50 00
1743	Henry Merdian, teaming	19 25
1744	E. W. Leech & Co., lumber	68 24
1745	A. W. Freer, livery	13 00
1746	Delta Lumber Co., lumber	191 87
1747	Dickinson & Hood, hardware	48 77

Voucher.		
1748	John Deppert, teaming	$ 27 82
1749	I. D. Smead & Co., final, Roberts & Dickinson	1,247 80
1750	A. McEnhill, final, Newberry	1,491 72
1752	Workmen's pay rolls, new buildings	426 86
1753	Calnon & Goodall, final payment, Dickinson	70 00
1754	J. B. Palmer, final payment. Dickinson	271 93
1755	E. A. Candler, final payment, Newberry	152 50
1758	C. W. Restrick, lumber	2 25
1759	DeMann Bros., lumber	26 20
1760	Dickinson & Hood, hardware	31 48
1761	Kennedy & Greig, castings	35 91
1762	W. C. Ross, lumber	91 48
1763	Geo. C. Oldfield, architect	55 40
1764	McDonald Bros. & Co., final payment, Dickinson	41 75
1765	Morton Brundage Co., final payment	48 75
1766	Daniel Lane, final payment, Roberts	268 50
1767	J. B. Morris, final payment	257 18
1768	E. Austin, final payment, Roberts	71 00
1769	Robinson & McDonald, final payment, Roberts	62 00
1770	Workmen's pay roll, new buildings	353 00
1771	W. H. Hollands & Son, final payment, Dickinson	370 87
1773	M. C. Martin & Co., final payment, Dickinson	162 70
1774	Workmen's pay roll, new buildings	169 95
1775	Geo. C. Oldfield, architect	42 40
1776	McDonald Bros. & Co., hot water heater, Miami	210 00
1777	H. D. Edwards & Co., steam pipe covering	29 50

Voucher.		
1778	Workmen's pay roll, new buildings	$ 258 78
1779	Daniel Lane, extras, Roberts	106 59
1780	James Caswell, final payment, Roberts	419 00
1782	Workmen's pay roll, new buildings	255 75
1783	Workmen's pay roll. new buildings	290 14
1784	W. H. Anderson & Son, blacksmithing	5 00
1785	Delta Lumber Co., lumber	32 45
1786	DeMann Bros., lumber	51 47
1787	Peter Dingemans, lumber	188 24
1788	Dickinson & Hood, hardware	32 34
1789	Geo. C. Oldfield, architect	62 00
1790	Richmond Backus Co., tracing cloth	10 85
1791	H. C. Weber & Co., hardware	6 95
1792	W. H. Hollands & Son, 1st estimate, Canfield	200 00
1793	W. H. Hollands & Son, 1st estimate, Horton	666 40
1794	Detroit Cornice Co., balance on Cass	44 49
1795	Daniel Lane, extras on Ferry	75 11
1796	Workmen's pay roll, new buildings	186 36
1797	Fulton I. and E. Works, bells	170 00
1798	Workmen's pay roll, new buildings	196 93
1799	Geo. J. Sexauer, hardware	74 25
1800	Limbach & Co., hardware	48 90
1801	H. D. Edwards & Co., steam pipe covering	91 67
1802	Geo. C. Oldfield- architect	50 40
1803	Workmen's pay roll, new buildings	86 01
1804	I. D. Smead & Co., 1st estimate, Canfield and Horton	1,630 14
1805	J. J. Craig, trees	209 70

Voucher.		
1806	I. D. Smead & Co., dry closets, Dickinson	$ 333 00
1807	M. C. Martin & Co., final payment, Newberry	77 79
1808	McClure & Elliott, final payment, Roberts	32 00
1809	Adam J. Orth, final payment, Roberts	156 75
1810	Workmen's pay roll, new buildings	66 71
1811	Workmen's pay roll, new buildings	42 00
1812	Scheible & Shefferly, 1st estimate, Palmer	748 43
1813	W. H. Hollands & Sons, extras, Canfield	491 95
1814	W. H. Hollands & Sons, 2nd estimates, Palmer and Canfield	1,594 83
1815	Detroit Cornice and Slate Co., final payment, Newberry	8 49
1816	Workmen's pay roll, new buildings	42 00
1817	Webster & Meathe, fittings	24 28
1818	E. A. Candler, extras, Newberry	88 50
1819	J. H. Crumley, plumbing	51 87
1821	W. H. Hollands & Sons, extras, Canfield	488 17
1882	W. H. Hollands & Sons, 3rd estimate, Palmer and Canfield	1,349 38
1823	Workmen's pay roll, new buildings	42 00
1824	M. C. Martin & Co., final payment, Newberry	26 68
1825	Workmen's pay roll, new buildings	42 00
1826	H. D. Edwards & Co., steam pipe covering	7 66
1827	Workmen's pay rolls, new buildings	31 50
1828	W. H. Hollands & Sons, 3rd payment, extras	594 96

Voucher.		
1830	P. J. Hayes, Inspector	$ 24 00
1831	P. J. Hayes, Inspector	24 00
1832	W. H. Hollands & Sons, 3rd estimate, Williams	860 20
1833	W. H. Hollands & Sons, 4th estimate, Palmer	981 75
1834	Smith & McDonald, 1st estimate, Palmer	621 35
1835	Brundage & Trombley, 1st estimate, Jackson	462 83
1836	Geo. C. Oldfield, architect	30 80
1837	Detroit Cornice and Slate Co., final payment, Dickinson	37 28
1838	J. E. Bolles & Co., final payment, Dickinson	7 65
1839	J. E. Bolles & Co., final payment, Newberry	103 36
1840	P. J. Hayes, Inspector	24 00
1841	P. J. Hayes, Inspector	24 00
1842	P. J. Hayes, Inspector	24 00
1843	Scheible & Shefferly 2nd estimate, Palmer	1,058 34
1844	W. H. Hollands & Sons, 6th estimate, Palmer, 4th estimate, Williams	1,332 38
1845	E. A. Candler, 1st and 2nd estimates, Jackson	1,031 73
1846	I. D. Smead & Co., 2nd estimate, Palmer and Williams	1,650 00
1847	Jas. B. Palmer, 1st estimate, Williams	400 00
1848	Jas. C. Cobb, 1st estimate, Williams	502 35
1849	Geo. C. Oldfield, architect	19 20
1850	P. J. Hayes, Inspector	24 00
1851	E. A. Candler, 3rd estimate, Jackson	464 78
1852	Geo. C. Oldfield, architect	36 00
1853	W. H. Hollands & Sons, 5th estimate, Williams	1,051 88
1854	P. J. Hayes, Inspector	24 00

Voucher.		
1855	Jas. C. Cobb, final payment, Newberry	$ 102 70
1856	W. Ferguson, teaming	16 66
1857	B. Guiney, furnace repairs	21 60
1858	P. J. Hayes, Inspector	24 00
1859	E. A. Candler, 4th estimate, Jackson	350 63
1860	W. H. Hollands & Son, 6th estimate, Williams:	600 00
1861	Schieble & Shefferly, 3rd estimate, Palmer	600 00
1862	P. J. Hayes, Inspector	24 00
1863	Geo. C. Oldfield, architect	25 60
1864	James C. Cobb, 2nd estimate, Williams	282 20
1865	Dingemann, Hertz & Tallman, 1st estimate Jackson	212 50
1866	Workmen's pay-roll, new buildings	34 77
1867	Detroit Cornice and Slate Co., 1st estimate Palmer	843 60
1868	James Cornell, 1st estimate Palmer	50 00
1869	Brundage and Trombley, 2nd estimate Jackson	200 00
1870	Calnon & Goodall, 1st estimate Palmer	318 24
1871	W. H. Hollands & Son, 7th estimate Williams	1,577 85
1872	Dingemann, Hertz & Tallman, 2nd estimate Jackson	64 60
1873	J. B. Palmer, 2nd estimate Williams	860 20
1874	E. A. Candler, 5th estimate, Jackson	600 00
1875	P. J. Hayes, inspector	24 00
1876	Geo. C. Oldfield, architect	60 80
1877	P. J. Hayes, inspector	24 00
1878	P. J. Hayes, inspector	24 00
1869	W. H. Hollands & Son, 7th estimate Palmer, 8th estimate Williams	998 75

Voucher.		
1880	E. A. Candler, 6th estimate Jackson	$ 500 97
1881	Dingemann, Hertz & Tallman, 3rd estimate Jackson	136 00
1882	I. D. Smead & Co., 1st estimate Jackson, 3rd estimate Palmer	1,750 62
1883	Calnon & Goodall, 2nd estimate Palmer	402 90
1884	Geo. C. Oldfield, architect	69 60
1885	James Cornell, 2nd estimate Palmer	216 75
1886	P. J. Hayes, inspector	20 00
1887	P. J. Hayes, inspector	24 00
1888	P. J. Hayes. inspector	24 00
1889	Geo. C. Oldfield, architect	20 60
1890	P. J. Hayes, inspector	24 00
1891	Workmen's pay-roll, new buildings	32 40
1892	A. Rohns & Co., iron bars	103 62
1893	Victor Compros, 3rd estimate Jackson	284 93
1894	A. Rohns & Co., 1st estimate Williams, Palmer and Jackson.	148 07
1895	Smith & McDonald, 2nd estimate Palmer	319 15
1896	Dingemann, Hertz & Tallman, 4th estimate Jsckson	255 00
1897	J. B. Palmer, 3rd estimate Williams	965 60
1898	E. A. Candler, 6th estimate Jackson	350 63
1899	Webster & Meathe, plumbers fittings	2 70
1900	Calnon & Goodall, 3rd and 4th estimate Palmer	390 06
1901	E. A. Candler, 7th estimate Jackson	168 30
1902	I. D. Smead & Co., 2nd estimate Jackson	880 00
1903	J. B. Palmer, 4th estimate Williams	376 55

Voucher.			
1904	Geo. C. Oldfield, architect.....	$ 8 40	
1905	W. H. Hollands & Sons, 8th estimate Palmer and balance of extras, 9th estimate Williams..	1,135 60	
1906	Workmen's pay-roll, new buildings.....	27 48	
1907	Geo. C. Oldfield, architect.....	8 00	
1908	P. J. Hayes, inspector.....	24 00	
1909	P. J. Hayes, inspector.....	24 00	
1910	Workmen's pay-roll, new buildings.....	17 73	
1911	Calnon & Goodall, 4th estimate Williams.....	909 50	
1912	E. A. Candler, 9th estimate Jackson.....	127 23	
1913	Calnon & Goodall, 4th estimate Palmer.....	159 26	
1914	Dingemann, Hertz & Tallman, 5th estimate Jackson.....	595 00	
1915	E. A. Candler, 9th estimate Jackson.....	184 80	
1916	I. D. Smead & Co., 3rd estimate Williams.....	825 00	
1917	Detroit Cornice and Slate Co., 1st estimate Williams.....	1,075 85	
1918	J. B. Palmer, 5th estimate Williams.....	874 25	
1919	Workmen's pay-roll, new buildings.....	6 25	
1920	P. J. Hayes, inspector.....	24 00	
1921	Brundage & Trombly, 4th estimate Jackson.....	398 74	
1922	Scheible & Shefferly, 4th estimate Palmer.....	984 30	
1923	P. J. Hayes, inspector.....	24 00	
		———	$66,375 52

REPAIR FUND.

Labor.

703	Workmen's pay roll.....	588 90	
720	Workmen's pay roll.....	841 33	

Voucher.					
722	Workmen's pay roll.....			$	29 34
723	Workmen's pay roll.....				1,475 78
739	Workmen's pay roll.....				1,475 15
741	Workmen's pay roll, repairs.....				1,580 58
742	"	"	"	.....	1,588 48
761	"	"	"	.....	1,577 32
762	"	"	"	.....	1,623 83
763	"	"	"	.....	44 70
783	"	"	"	.....	1,339 14
784	"	"	"	.....	945 85
804	"	"	"	.....	916 99
805	"	"	"	.....	514 82
806	"	"	"	.....	806 66
822	"	"	"	.....	233 06
832	"	"	"	.....	401 40
833	"	"	"	.....	419 84
836	"	"	"	.....	290 06
837	"	"	"	.....	319 41
838	"	"	"	.....	242 40
855	"	"	"	.....	217 70
856	"	"	"	.....	212 89
861	"	"	"	.....	211 50
864	"	"	"	.....	259 50
875	"	"	"	.....	219 99
876	"	"	"	.....	248 62
877	"	"	"	.....	1 50
880	"	"	"	.....	248 69
886	"	"	"	.....	154 69
902	"	"	"	.....	276 89
905	"	"	"	.....	253 25
908	"	"	"	.....	245 58
915	"	"	"	.....	241 54
916	"	"	"	.....	235 20
917	"	"	"	.....	238 48
926	"	"	"	.....	232 30
927	"	"	"	.....	235 72
928	"	"	"	.....	220 62
937	"	"	"	.....	133 03
939	"	"	"	.....	12 00
946	"	"	"	.....	60 24

Voucher.					
947	Workmen's pay roll, repairs.....	$	56 76		
948	" " "		82 80		
949	" " "		76 92		
957	" " "		87 14		
958	" " "		115 78		
959	" " "		106 57		
964	" " "		80 62		
966	" " "		82 96		
968	" " "		68 55		
969	" " "		58 19		
974	" " "		74 20		
976	" " "		73 88		
977	" " "		69 93	$22,129	69

SALARY FUND.

143	W. E. Robinson, July salary....	333	33	
144	John R. King, "	208	33	
145	Robert Wallace, "	166	66	
146	W. E. Bauble, "	83	33	
147	H. L. Reeves, "	55	00	
148	Frank Wilson, "	55	00	
149	B. Reilly, "	100	00	
150	Janitors' pay roll, " ...	2,232	00	
151	Janitors' pay roll, Aug. salary....	2,252	00	
152	H L. Reeves, "	55	00	
153	Frank Wilson, " . .	55	00	
154	B. Reilly, "	100	00	
155	W. E. Robinson, "	333	33	
156	John R. King, " .	208	33	
157	Robert Wallace, "	166	66	
158	W E. Bauble, " . ..	83	33	
159	Janitors' pay roll, September....	2,277	00	
160	Phillip Foy, clerk Supervisor's office.....	55	00	
161	Frank Wilson, clerk Supervisor's office.....	22	00	
162	H. L. Reeves, clerk Secretary's office.....	67	66	
163	W. E. Robinson, Sept. salary....	333	33	

Voucher.			
164	John R. King, Sept. salary.....	$ 208	33
165	Robert Wallace, "	166	66
166	W. E. Baubie, "	83	33
167	Teachers' pay roll, September salaries.....	31,862	00
168	John English, cleaning.....	42	00
169	William Emblim, sub-janitor....	15	75
170	Mrs. Mary Storm, janitress.....	22	50
171	H. L. Reeves, clerk Secretary's office.....	75	00
172	Janitors' pay roll, October.....	2,827	00
173	Phillip Foy, clerk Supervisor's office.....	55	00
174	W. Emblim, sub janitor.....	11	88
175	W. E. Robinson, Oct. salary.....	333	33
176	John R. King, "	208	33
177	Robert Wallace, "	166	66
178	W. E. Baubie, "	83	33
179	Thos. Parlaw, balance October salary	15	00
180	Teachers' pay roll, October salaries	34,578	00
181	Jacob Seiler, cleaning Roberts...	19	00
182	Mrs. Pfeiffer, cleaning Roberts..	7	50
183	R. F. Lanagan, sub-janitor.....	15	74
184	William Emblim, sub-janitor.....	50	91
185	Janitors' pay-roll, November salaries.....	2,939	36
186	Phillip Foy, clerk Supervisor's office.....	55	00
187	H. L. Reeves, clerk Secretary's office.....	75	00
188	Teachers' pay-roll, November salaries	34,525	12
189	W. E. Robinson, November salary	333	33
190	John R. King, "	208	33
191	Robert Wallace, "	166	66
192	W. E. Baubie, "	83	33
193	W. E. Robinson, December salary	333	33
194	John R. King, "	208	33

Voucher.		
195	Robert Wallace, December salary	$ 166 66
196	W. E. Baubie, "	83 33
197	Janitors' pay-roll, December salaries	2,913 00
198	Phillip Foy, clerk Supervisor's office	55 00
199	H. L. Reeves, clerk Secretary's office	75 00
200	Teachers' pay-roll, December salaries	33,933 62
201	W. E. Robinson, Jan. salary	333 33
202	John R. King, "	208 33
203	Robert Wallace, "	166 66
204	W. E. Baubie, "	83 33
205	H. L. Reeves, "	75 00
206	P. J. Foy, "	55 00
207	Janitors' pay roll, January salaries	2,905 00
208	Teachers' pay roll, "	34,212 38
209	W. E. Robinson, Feb. salary	333 33
210	John R. King "	208 33
211	Robert Wallace, "	166 66
212	W. E. Baubie, "	83 33
213	H. L. Reeves, "	75 60
214	P. J. Foy, "	55 00
215	Janitors' pay roll, "	2,721 50
216	W. Emblim, sub-janitor	25 36
217	Teachers' pay roll	33,843 87
218	W. Emblim, sub-janitor	5 44
219	H. L. Reeves, clerk Secretary's office	75 00
220	P. J. Foy, clerk Supervisor's office	55 00
221	Janitors' pay roll, March salaries	2,612 00
222	W. Emblim, sub-janitor	14 25
223	W. E. Robinson, March salary	333 33
224	John R. King, "	208 33
225	R. Wallace, "	166 66
226	W. E. Baubie "	83 33
227	Teachers' pay roll, March salaries	33,172 25
228	W. Emblim, substitute janitor.	28 50

Voucher.		
229	H. L. Reeves, clerk Secretary's office	$ 75 00
230	P. J. Foy, clerk Supervisor's office	55 00
231	William Emblin, sub-janitor.	31 48
232	Henry Mann, sub-janitor	25 80
233	Janitors' pay roll, April salary	2,618 00
234	Teachers' pay roll, "	33,153 87
235	W. E. Robinson, "	333 33
236	John R. King, "	208 33
237	R. W. Wallace, "	166 66
238	W. E. Baubie, "	83 33
249	H. Mann, substitute janitor	7 50
250	Janitors' pay roll, June salaries	2,517 00
251	Phillip Foy, Supervisor's clerk	55 00
252	H. L. Reeves, Secretary's clerk	75 00
253	Teachers' pay roll, June salaries	32,885 00
254	W. E. Robinson, Superintendent's salary	333 37
255	John R. King, Secretary' salary	208 37
256	Robert Wallace, Supervisor's salary	166 70
257	W. E. Baubie, Attorney's salary	83 37
1059	John R. King, sundry bills	119 22
1060	R. Byrne & Co, hardware	11 12
1061	Dean Godfrey & Co., cord	4 30
1062	Deposit Gas Light Co., gas	18 75
1063	A. Laitner, brushes	66 08
1064	Mutual Gas Co., gas	3 00
1065	Telegraph and Telephone Construction Co., telephones	22 50
1080	John R. King, sundry bills	33 90
1081	John Miller, laundering	3 00
1082	Telegraph and Telephone Construction Co., telephones	7 40
1090	John R. King, sundry bills	5 09
1091	Detroit Soap Co., soap	21 90
1092	L. Crabb & Co., brooms	17 50
1093	Detroit Gas Light Company, gas, July	16 05

Voucher.		
1094	Charles Klein, hardware.....	$ 38 69
1095	Limbach Sons & Co., corduroy...	24 20
1096	A. Laitner, brushes.....	29 00
1097	A. M. Parker, salsoda.....	11 55
1118	A. M. Parker, salsoda.....	6 30
1119	H. C. Weber & Co., hardware...	6 50
1120	R. L. Polk & Co., directories....	12 00
1131	John R. King, sundry bills.....	13 85
1132	Detroit Gas Light Co., gas, August	22 80
1134	Edson, Moore & Co., dust cloth..	16 35
1141	T. H. Eaton & Son, nigrosene....	22 50
1143	A. Laitner, brushes.....	42 50
1144	Mutual Gas Co., gas, August.....	8 25
1147	A. M. Parker, matches.....	4 00
1148	Taylor, Wolfenden & Co., twine..	1 85
1149	H. C. Weber & Co., hardware...	19 65
1150	Jno. R. King, sundry bills.....	8 76
1176	Standard Oil Co., oil.....	8 00
1177	Geo. Sexaur, hardware.....	16 50
1178	Mutual Gas Co., gas, September..	1 50
1179	Tel. and Tel. Con. Co., telephones	30 00
1180	Dickinson & Hood, hardware....	6 75
1181	J. E. Davis & Co., sponges.....	7 25
1182	Detroit News Co., books and stationery.....	226 50
1183	W. R. Cole, slate rulers.....	10 00
1184	Detroit Gas Light Co., gas, September.....	30 00
1186	John R. King, sundry bills.....	3 95
1187	C. A. Waldermar, laundering....	6 00
1188	H. C. Weber & Co., hardware...	11 60
1189	Geo. L. Weber & Co., lamp wicks	7 20
1190	Richmond, Backus Co., stationery	397 05
1191	J. A. Roys, books.....	12 00
1239	John R. King, sundry bills.....	.23 70
1240	Detroit News Co., books for poor children.....	203 13
1241	H. J. Milburn, combs.....	3 00
1242	Macauley Bros., books for poor children.....	317 13

Voucher.		
1243	C. A. Strellinger & Co., hardware	$ 5 25
1244	A. Laitner, brushes	85 38
1245	Standard Oil Co., oil	2 35
1246	Jas. E. Davis & Co., mercury	6 01
1247	A. M. Parker, soda	5 29
1248	Dean, Godfrey & Co., sash cord	12 00
1249	C- A. Waldemar, laundering	4 50
1250	John Miller, laundering	3 00
1251	Dickinson & Hood, hardware	274 44
1326	Whitemore, Robinson & Co., modeling clay	3 65
1327	Detroit Gas Light Co, gas, November	73 12
1328	Mutual Gas Light Co., gas, November	15 00
1331	John R. King, sundry bills	24 48
1363	John R. King, sundry bills	20 95
1364	Detroit Odor Purifier Co., alexiteria	21 60
1267	John R. King, sundry bills	73 36
1268	Scofield, Shurmer & Teagle, oil	32 53
1269	Schulte Soap Co., soap	40 80
1272	Macauley Bros., books	26 24
1273	A. Laitner, brushes	9 00
1274	Hudson & Symington, mats	129 25
1275	Gamble & Partridge, carpet remnants	6 25
1276	Conrad Fey, oil	5 00
1277	Edison Electrical Co., lights	17 00
1278	Detroit Water Commissioners, water tax	976 50
1279	Detroit Gas Light Co., gas, October	65 74
1280	L. Crabb & Son, brooms	20 00
1283	W. H. Anderson & Son, knives and scrapers	42 00
1284	John R. King, sundry bills	43 52
1285	Detroit News Co., books and stationery	528 40
1266	Workmen's pay roll, storing	11 97

Voucher.			
1297	Pittmans & Dean, coal	$ 695	70
1298	Workmen's pay roll, storing	12	30
1304	Thomas Richardson, weighing coal	25	20
1308	Workmen's pay roll, storing	13	50
1317	Brownlee & Co., kindling	233	56
1318	Workmen's pay roll, storing	4	02
1319	Pittmans & Dean, coal	9	44
1320	Thos. Montgomery & Co., wood	51	30
1323	Workmen's pay roll, storing	14	18
1376	Schofield, Schurmer & Teagle, oil	30	79
1377	Schofield, Schurmer & Teagle, oil	23	28
1378	Schofield, Schurmer & Teagle, oil	27	08
1379	Mutual Gas Company, gas, December	7	20
1380	Tel. and Tel. Construction Co., telephones	31	50
1381	Gamble & Partridge, remnants	7	50
1382	F. A. Bartels, paper hanging	13	50
1383	Chas. Klein, ash buckets	66	60
1384	Edison Electric Light Company, lighting	6	88
1385	A. Laitner, brushes	105	00
1386	A. M. Parker, brimstone	15	82
1389	Schweikart's Little Four Ice Co., ice	10	35
1391	John R. King, sundry bills	36	62
1405	Detroit Gas Light Company, gas, December	84	87
1408	John R. King, sundry bills	4	40
1409	H. C. Weber & Co., hardware	19	15
1410	Eberbach & Co., druggists' sundries	19	15
1412	John Miller, laundering	3	00
1413	King, Klugh & Co., glassworks	4	78
1414	A. M. Parker, matches	4	00
1417	R. Byrne & Co., hardware	23	00
1433	C. K. Trombley, taxes	20	22
1434	Mutual Gas Company, gas, January	5	10

Voucher.		
1435	C. A. Waldamar, laundering..... $	6 00
1436	Detroit Gas Light Company, gas, January	80 38
1437	J. Breitmeier & Son, plants.....	5 00
1440	Commercial Electric Co., globes.	3 90
1441	Detroit News Co., books for poor children.....	121 81
1442	J. Lowrie & Son, ribbons.....	3 40
1443	A. Laitner, brushes.....	14 50
1444	H. R. Pattengill, moderators.....	5 00
1445	Tel. and Tel. Construction Co., telephones.....	8 20
1446	Taylor, Wolfenden & Co., supplies	4 50
1448	John R. King, sundry bills.....	52 26
1469	Schofield, Schurmer & Teagle, oil	20 12
1470	Schofield, Schurmer & Teagle, oil	31 54
1174	John R. King, sundry bills.....	44 00
1485	K. Kilcline, oil.....	14 10
1487	R. Byrne & Co., hardware.....	15 02
1488	Chas. Klein, hardware.....	13 70
1489	Gamble & Pardridge, remnants..	6 25
1490	Electric Soap Company, soft soap	16 88
1491	E. D. Foster, shoe pegs.....	3 47
1492	Western Paper Co., straw board..	1 50
1493	Mutual Gas Company, gas, February.....	4 35
1494	T. H. Eaton & Son, nigrosene....	22 50
1495	Detroit Willow Ware Works, waste baskets.....	11 00
1496	G. & R. McMillan, toilet soap...	3 75
1497	Dean, Godfrey & Co., picture wire	2 10
1498	Schofield, Schurmer & Co., oil...	1 88
1499	Williams, Sheley & Brooks, toilet soap.....	4 15
1500	H. C. Weber & Co., hardware...	13 00
1501	A. Laitner, brushes	64 00
1502	Detroit News Co., books for poor children.....	426 14

Voucher.		
1513	Edison Illuminating Co., light, February	$ 4 48
1514	Detroit Gas Light Co., gas, February	63 38
1521	Workmen's pay roll, supplies	14 40
1522	Williams, Sheley & Brooks, druggists	2 08
1523	Lowrie & Sons, ribbons	3 58
1524	Michigan Oil Co., oil	6 50
1525	Detroit Water Commission, water tax	16 00
1527	Commercial Electric Light Co., globes	4 50
1528	Detroit New Co., books, poor children	96 58
1529	Allan Shelden Co., cotton cloth	13 75
1530	Jno. R. King, sundry bills	15 00
1531	T. B. Rayl & Co., hardware	18 32
1532	A. Laitner, brushes	19 00
1533	A. M. Parker, sal soda	5 95
1534	H. D. Edwards & Co., rubber matting	41 60
	Standard Oil Co., oil	15 00
	Taylor, Wolfenden & Co., towels	3 90
	Workmen's pay roll, supplies	14 40
1561	S. Taplin, flowers	35 00
1564	Tel. and Tel. Con. Co., telephones	40 50
1565	Edison Electric Light Co., lights	3 04
1566	John R. King, sundry bills	45 98
1567	Standard Oil Co., oil	6 75
1568	L. Crabb & Son, brooms	20 00
1569	R. Byrne & Co., hardware	11 94
1570	A. Laitner, brushes	148 25
1571	Detroit Gas Light Co., gas, March	45 45
1572	A. M. Parker, brimstone	35 28
1590	Byrne & Co., mop swabs	10 00
1592	Detroit Gas Light Co., gas, April	26 40
1593	Jno. R. King, sundry bills	43 05
1594	Detroit News Co., books	1,443 64

Voucher.		
1595	A. M. Parker, brimstone.....	$ 13 23
1597	Dickinson & Hood, hardware...	8 50
1614	Macauley Bros., books.....	818 30
1619	C. A. Waldemar, laundering.....	6 00
1620	A. Kuhlman, apparatus.....	2 65
1621	John R. King, sundry bills.....	14 30
1622	Dean, Godfrey & Co., sash cord..	3 60
1623	A. Laitner, brushes.....	2 25
1626	Schofield, Schurmer & Teakle, oil	5 38
1627	Eberbach & Co., chemicals.....	70 60
1628	T. B. Rayl & Co., hardware.....	12 04
1630	Peter Henkel & Co., soap.....	7 50
1631	Edison Illuminating Company, current.....	8 80
1632	Detroit Gas Light Company, gas, May.....	29 25
1643	John Miller, laundering.....	3 00
1645	E. H. Knapp, clerical services....	38 00

Fuel.

1070	J. & T. Hurley, kindling.....	11 16
1071	Pittmans & Dean, coal.....	187 60
1076	Workmen's pay roll, wood piling.	39 29
1079	Workmen's pay roll, wood piling.	7 37
1108	T. Montgomery & Co , wood.....	515 50
1085	Pittmans & Dean, coal.....	2,289 52
1109	Workmen's pay roll, wood piling.	46 04
1110	N. Bostwick, weighing coal.....	57 12
1111	Pittmans & Dean, coal.....	2,185 40
1114	Workmen's pay roll, wood piling.	35 59
1123	Pittmans & Dean, coal.....	1,477 76
1124	N. Bostwick, weighing coal.....	46 07
1125	T. Montgomery & Co., wood.....	577 11
1127	Workmen's pay roll, wood piling.	18 35
1129	Workmen's pay roll, wood piling.	31 00
1137	Pittmans and Dean, coal.....	1,724 41
1138	Workmen's pay roll, wood piling.	17 57
1160	Pittmans & Dean, coal.....	1,205 45
1161	N. Bostwick, weighing coal.....	85 25
1174	Workmen's pay roll, storing.....	21 70

Voucher.		
1207	Van Antwerp & Co., wood	$ 13 00
1208	Pittmans & Dean, coal	135 31
1209	T. Montgomery & Co., wood	117 00
1237	Workmen's pay roll, storing	22 07
1238	Workmen's pay roll, storing	13 65
1256	Workmen's pay roll, storing	3 05
1324	Workmen's pay roll, storing	14 60
1345	Van Antwerp & Co., wood and kindling	24 00
1346	Workmen's pay roll, storing	10 00
1353	W. B Miller, wood sawing	52 65
1355	Wm. Johnston, wood sawing	68 18
1357	T. Montgomery & Co., wood	142 50
1365	Workmen's pay roll, storing	1 28
1373	Workmen's pay roll, storing	3 70
1397	Van Antwerp & Co., wood	11 25
1398	T. Montgomery & Co., wood	142 50
1399	Pittmans & Dean, coal	902 04
1423	N. Bostwick, weighing coal	79 50
1424	T. Montgomery & Co., wood	16 47
1425	Pittmans & Dean, coal	788 95
1426	Beavis & Freeman, coke	3 12
1460	N. Bostwick, weighing coal	10 55
1480	Pittmans & Dean, coal	255 55
1481	T. Montgomery & Co., wood	37 00
1503	Thomas Montgomery, wood	33 40
1504	Pittmans & Dean, coal	97 88
1551	Thos. Montgomery wood	34 20
1552	Pittmans & Dean coal	116 75
1606	Thos. Montgomery & Co., wood	124 00
1607	Pittmans & Dean, coal	162 39
1608	N. Bostwick, weighing coal	24 20

Furniture.

1069	H. R. Williams, moving pianos	$ 5 00
1072	Freund Bros., curtains	21 50

Printing and Stationery.

1067	Detroit News Co., stationery	$ 6 98
1068	W. F. Moore, printing	14 75

Voucher.		
1069	Richmond, Backus Co., stationery	$ 30 20
1077	F. J. Schwankovsky, pianos	2,296 22
1078	Clough & Warren Organ Co., pianos	340 99
1089	Fire Extinguisher Co., extinguishers	1,905 00
1107	C. H. Habercorn, tables	17 75
1185	John P. Becker, tuning piano	3 00
1190	Murphy, Wassey & Co., chairs	60 00
1200	Keenan & Jahn, chairs	55 25
1201	C. H. Habercorn, tables	48 00
1202	Gamble & Partridge, carpets	368 82
1203	Freund Bros., shades	32 25
1204	John Brushaber, chair bottoms	2 89
1205	J. B. Baker, freight on seats	67 20
1206	C. J. Whitney & Co., piano cover	3 15
1251	Freund Bros., desks	66 50
1252	Stevenson & Marsh, freight on seats	9 60
1253	C. J. Whitney, pianos	525 00
1271	Newcomb, Endicot & Co., curtains	36 00
1282	J. H. Black & Co., carpet	11 00
1295	Freund Bros., chairs	17 50
1296	Thomas Charles Co., kindergarten	49 95
1306	C. R. Brand & Co., curtains	70 00
1307	A. H. Andrews & Co., seats	2,672 84
1309	Workmen's pay roll, bookcases	90 80
1325	Workmen's pay roll, bookcases	33 34
1329	C. J. Whitney & Co., piano cover	2 75
1330	Newcomb, Endicott & Co., shades	4 46
1332	L. S. & M. S. Ry, freight on seats	8 42
1341	A. H. Andrews & Co., seats	1,133 60
1341	C. H. Habercorn & Co., seats	11 00
1342	C. H. Mills & Co., chairs	26 91
1343	Buffalo School Furniture Co., inkwells	3 00
1344	Workmen's pay roll, bookcases	66 00
1356	Workmen's pay roll, bookcases	53 27

Voucher.		
1359	S. S. McGrath, curtains.....	$ 109 00
1360	The Swift Agency, letter file....	7 00
1361	Webster & Meathe, gas and electric fixtures.....	113 00
1366	Workmen's pay roll, bookcases..	29 10
1374	Workmen's pay roll, bookcases..	10 00
1388	C. J. Whitney & Co., piano cover	2 75
1390	J. H. Ling, tuning piano.....	1 50
1400	S. S. McGrath, curtains.....	67 50
1401	Freund Bros., chairs.....	61 00
1402	Leonard & Carter, tables.....	30 00
1406	Workmen's pay roll, bookcases..	11 11
1415	Moreton Truck Co., cartage.....	3 00
1416	M. C. R. R., freight.....	12 00
1429	C. H. Habercorn, furniture.....	600 00
1438	J. P. Becker, tuning piano.....	150 00
1456	Webster & Meathe, fittings, Board room.....	145 65
1457	Moreton Truck Co., freight.....	13 06
1458	M. C. R. R., freight.....	5 35
1459	Keenan & Jahn, chairs.....	67 17
1476	Moreton Truck Co., trucking....	12 00
1477	Albert Schaub, repairing clocks..	4 75
1482	S. S. McGrath, curtains.....	41 95
1505	A. Backus, Jr., & Son, lumber....	45 98
1515	M. C. R. R. freight.....	3 52
1516	Keenan & Jahn, chairs.....	13 55
1520	Workmen's pay roll, book cases..	17 79
1525	J. Henry Ling, rent of piano.....	6 00
1536	Newcomb, Endicott & Co., carpet	26 41
1539	C. H. Mills, chairs.....	1 59
1540	Leonard & Carter, desk.....	45 00
1541	F. D. Standish, desk.....	9 60
1542	Workmen's pay roll, book cases..	77 69
1543	C. H. Haberkorn, chair.....	12 00
1544	A. H. Andrews & Co., seats.....	156 00
1557	Workmen's pay roll, book cases..	86 28
1558	Workmen's pay roll, book cases..	81 26
1560	W. P. Holliday, file boxes.....	62 50
1563	W. G. Wuerth, tuning pianos.....	4 00

Voucher.		
1576	J. J. McGrath, curtains.....	$ 8 00
1577	H. M. Park, ventilators.....	10 80
1583	Workmen's pay roll, book cases..	74 16
1585	Workmen's pay roll, book cases..	62 31
1586	Workmen's pay roll, book cases..	37 52
1589	Workmen's pay roll.....	51 39
1591	J. H. Ling, tuning piano.....	1 50
1596	Gamble & Partridge, carpet.....	5 31
1603	A. Backus, Jr., & Co., lumber....	26 32
1604	Workmen's pay roll, furniture...	57 32
1605	P. Dingemans, lumber.....	21 94
1616	Workmen's pay roll, book trays..	61 80
1617	Workmen's pay roll, book trays..	76 04

Printing and Stationery.

1083	Calvert Litho. and Eng. Co., check books.....	49 00
1087	Evening News Co., advertising...	33 60
1088	C. M. Rousseau, printing.....	58 75
1100	C. M. Rousseau "	32 25
1101	W. F. Moore, "	9 50
1102	Gulley, Bornman & Co., printing.	22 50
1103	W. Suckert & Sons, book binding	10 50
1104	Calvert Litho. and Eng. Company, diplomas.....	56 20
1105	Detroit Free Press, printing.....	63 00
1106	Detroit News Co., stationery.....	2 89
1115	Detroit News Co., "	773 75
1121	Gulley, Bornman & Co., printing.	19 50
1139	Richmond Backus Co., stationery	2 90
1140	Detroit News Co., "	283 41
1145	Macauly Bros., "	383 15
1146	J. Macfarlane, books.....	7 40
1151	Detroit Evening Journal, advertising.....	7 20
1152	Detroit Free Press, advertising...	15 04
1153	Detroit Tagelblatt, " ...	1 60
1154	Detroit Evening News.....	15 68
1155	Lozee, O'Brien & Co., printing...	12 78
1156	W. F. Moore, " ...	11 90

Voucher.		
1157	Richmond, Backus Co., stationery	$ 462 65
1192	C, M. Rousseau, printing.....	38 38
1193	W. F. Moore, printing.....	204 99
1194	Lozee, O'Brien & Co., printing...	9 94
1195	Detroit Evening Journal, advertising.....	3 00
1196	Gulley, Bornman & Co., printing.	18 50
1197	Detroit Evening News, advertising.....	7 56
1198	Evening Sun, advertising.....	10 00
1155	Lozee, O'Brien & Co., printing...	31 24
1270	Richmond, Backus Co., stationery.....	25 50
1281	Burkhart & Walker, posting bills	12 50
1286	Sontag Herald, advertising.....	3 60
1287	Detroit Tageblatt, advertising...	3 60
1288	The Times, advertising.....	3 36
1289	Michigan Volksblatt, advertising	3 00
1290	Evening News, advertising.....	7 98
1291	Detroit Free Press, advertising..	3 30
1292	Daily Abend Post, advertising...	1 50
1293	W. F. Moore, printing.....	167 40
1294	Lozee, O'Brien & Co., printing...	24 14
1333	Detroit Business University, bookkeeping blanks.....	37 25
1334	Detroit News Co., stationery....	108 40
1335	Richmond, Backus Co., stationery	42 85
1336	Macauley Bros., stationery.....	28 26
1337	Tribune Printing Co., advertising	28 00
1338	Lozee, O'Brien & Co., printing..	21 30
1339	W. F. Moore, printing.....	9 75
1362	Lozee, O'Brien & Co., printing...	14 20
1387	Detroit News Co., stationery....	101 72
1392	Detroit Free Press, advertising..	10 92
1393	Richmond, Backus Co., stationery	159 75
1394	Chas. Volbrecht, advertising.....	3 60
1395	W. F. Moore, printing.....	23 15
1396	Lozee, O'Brien & Co., printing..	5 68
1411	Detroit News Co., stationery.....	22 88
1418	Macauley Bros., stationery.....	92 85

Voucher.		
1419	Lozee, O'Brien & Co., printing...	$ 7 10
1420	Gulley, Bornman & Co., printing	39 75
1421	Detroit Tageblatt, advertising...	8 40
1422	Aldine Printing Works, printing.	23 50
1439	Calvert Litho. and Eng. Co., diplomas	21 12
1449	Aldine Printing Co., printing....	17 75
1450	Detroit Journal Co., advertising..	1 20
1451	Evening News Co., advertising..	6 58
1452	Gulley, Bornman & Co., printing	20 50
1453	Lozee, O'Brien & Co., printing..	29 82
1454	W. F. Moore, printing.....	76 16
1455	Richmond, Backus & Co., stationery.....	27 05
1471	Daily Abend Post, advertising...	1 50
1472	Detroit Times, advertising.....	82
1478	Detroit Free Press, advertising..	63 57
1479	Lozee, O'Brien & Co., printing..	62 82
1506	Richmond, Backus Co., stationery	36 17
1511	Lozee, O'Brien & Co., printing...	25 36
1512	Gulley, Bornman & Co., printing	13 00
1519	C. Boucher, indexing.....	56 50
1545	Richmond, Backus Co., stationery	38 30
1546	W. F. Moore, printing.....	32 45
1547	Calvert Litho. and Eng. Co. printing.....	3 79
1548	Lozee, O'Brien & Co., printing..	39 76
1549	Macauley Bros., stationery.....	39 16
1550	Daily Abend Post, advertising...	7 00
1559	Detroit News Co., stationery.....	539 33
1573.	W. F. Moore, printing.....	29 10
1574	Calvert Litho. and Eng. Co., printing.....	39 00
1575	Lozee, O'Brien & Co., printing..	14 20
1598	Gulley, Bornman & Co., printing	22 50
1599	W. F. Moore, printing.....	27 00
1600	Lozee & O'Brien, printing.....	11 36
1601	C. M. Rousseau, printing.....	6 00
1602	Richmond & Backus Co., stationery.....	20 78

Voucher.			
1624	Rand, McNally & Co., atlas.....	$ 125	00
1625	Silas Farmer, maps.....	12	00
1629	Detroit News Co., books and stationery.....	322	18
1633	W. F. Moore, printing.....	15	25
1634	Richmond, Backus Co., stationery	47	00
1635	Aldine Printing Co., printing.....	10	50
1636	C. A. Lozee, printing	31	24
1637	C. A. Lozee, printing.....	206	66

EXPENDITURES BY SCHOOLS.

The rule requires that an account shall be kept of expenditures in the different schools.

Herewith is submitted a detailed account in accordance with the rule :

BAGLEY SCHOOL.

MRS. M. K. MONAGHAN, Principal.

Corner Fourteenth avenue and Pine street.

Paid teachers	$	4,025 00
" janitor		420 00
" for fuel		270 40
" for supplies		12 00
" for repairs		124 30
Total	$	4,851 70

BARSTOW SCHOOL.

MISS C. CROSMAN, Principal.

Larned street, near Riopelle street.

Paid teachers	$	10,316 25
" janitor		720 00
" for fuel		376 67
" for supplies		29 85
" for heating, ventilating and alterations		7,683 79
Total	$	19,121 56

BELLEVUE SCHOOL.

Mrs. Anna Devine, Principal.

Bellevue avenue, near Champlain street. .

Paid teachers	$	1,975 00
" janitor		240 00
" for fuel		100 26
" for supplies		12 00
" for repairs		64 87
Total	$	2,392 13

BELLEFONTAINE SCHOOL.

Miss M. M. Lenahan, Principal.

Morrill street, near Fort street west.

Paid teachers	$	5,882 00
" janitor		723 60
" for fuel		316 25
" for supplies		20 35
" for repairs		220 94
" for sewer connections		119 25
" for piano		237 77
Total	$	7,520 16

BISHOP SCHOOL.

Mr. L. G. Gorton, Principal.

Winder street, near Hastings street.

Paid teachers	$	15,535 25
" janitor		1,200 00
" for fuel		847 23
" for supplies		107 20
" for piano		190 55
" for alterations		4,616 48
Total	$	22,496 71

BROWNSON SCHOOL.

Miss A. D. Schrader, Principal.

Maple street, near Joseph Campau avenue.

Paid teachers	$	3,485 00
" janitor		420 00
" for fuel		224 39
" for supplies		22 21
" for trees		24 30
" for repairs		76 32
Total	$	4,252 22

CAMPBELL SCHOOL.

Miss A. Aldridge, Principal.

Corner St. Aubin and Alexandrine avenues.

Paid teachers	$	3,567 50
" janitor		420 00
" for fuel		305 29
" for supplies		12 00
" for trees		39 60
" for repairs		94 02
Total	$	4,438 41

CASS SCHOOL.

Mr. S. E. Whitney, Principal.

Grand River and Second avenues.

Paid teachers	$	16,679 50
" janitor		1,395 00
" for fuel		420 83
" for supplies		83 01
" for furniture		287 49
" for addition and alterations		6,161 57
Total	$	25,027 40

CHANEY SCHOOL.

Miss Marian Law, Principal.

Sullivan avenue, near Linden street.

Paid teachers	$	3,435 00
" janitor		420 00
" for fuel		213 10
" for supplies		18 00
" for repairs		80 69
Total	$	4,166 79

CLAY SCHOOL.

Miss A. A. Michaels, Principal.

Pitcher street, near Second avenue.

Paid teachers	$	5,350 00
" janitor		540 00
" for fuel		243 98
" for supplies		28 94
" for piano		96 58
" for repairs		195 50
Total	$	6,455 00

CLINTON SCHOOL.

Mr. W. C. Martindale, Principal.

Clinton street, near Rivard street.

Paid teachers	$	5,270 00
" janitor		635 28
" for fuel		342 46
" for supplies		24 25
" for repairs		226 27
Total	$	6,498 26

CRAFT SCHOOL.

Miss Sarah M. Howard, Principal.

Corner Vinewood avenue and Ash street.

Paid teachers	$ 2,475	00
" janitor	305	00
" for fuel	158	75
" for supplies	8	00
" for repairs	58	58
Total	$ 3,006	33

CUSTER SCHOOL.

Miss M. E. Markey, Principal.

Hammond avenue, near Ranspach street.

Paid teachers	$ 1,300	00
" janitor	180	00
" for fuel	88	67
" for piano	45	05
" for supplies	8	00
" for repairs	113	76
Total	$ 1,735	48

DICKINSON SCHOOL.

Miss Elvira E. Edens, Principal.

Corner Twelfth and Brigham streets.

Paid teachers	$ 8,925	00
" janitor	447	00
" for trees	27	00
" for fuel	371	04
" for supplies	19	00
" for furniture	905	89
" for building	5,914	10
Total	$ 11,609	03

DUFFIELD SCHOOL.

Mr. William A. Ellis, Principal.

Clinton street, near Joseph Campau avenue.

Paid teachers	$	11,171 25
" janitors		810 00
" for fuel		545 64
" for supplies		51 50
" for piano and desk		398 85
" for heating, ventilating and alterations		9,526 90
Total	$	22,504 14

EVERETT SCHOOL.

Miss Louise E. Rohnert, Principal.

Fort street east, near Hastings street.

Paid teachers	$	8,230 00
" janitor		720 00
" for fuel		309 76
" for supplies		26 50
" for repairs		79 86
Total	$	9,366 12

FARRAND SCHOOL.

Miss A. H. Dole, Principal.

Corner Harper avenue and John R street.

Paid teachers	$	4,165 50
" janitor		564 00
" for fuel		345 98
" for supplies		12 00
" for trees		8 10
" for repairs		127 55
Total	$	5,223 13

FERRY SCHOOL.

Miss H. A. Duncan, Principal.

Corner Ferry and Mitchell avenues.

Paid teachers	$	3,296 25
" janitors		474 00
" for fuel		277 73
" for supplies		20 00
" for furniture		333 29
" for repairs		392 87
Total	$	4,794 14

FIRNANE SCHOOL.

Miss E. R. Gray, Principal.

Fort street east, near McDougall avenue.

Paid teachers	$	3,375 00
" janitor		567 11
" for fuel		278 49
" for supplies		12 15
" for repairs		195 58
Total	$	4,428 33

FRANKLIN SCHOOL.

Miss I. H. Mackay, Principal.

Corner Seventh and Pierce streets.

Paid teachers	$	3,450 00
" janitor		441 58
" for fuel		226 69
" for supplies		12 00
" for repairs		103 28
Total	$	4,233 55

GARFIELD SCHOOL.

Mrs. E. A. Thomson, Principal.

Corner Frederick and Rivard streets.

Paid teachers	$	1,865 00
" janitor		306 00
" for fuel		149 42
" for trees		8 10
" for supplies		10 00
" for repairs		40 94
Total	$	2,379 46

GRATIOT SCHOOL.

Mrs. I. Ruehle, Principal.

Gratiot avenue, near Mack aveuue.

Paid teachers	$	1,150 00
" janitor		180 00
" for paving		606 08
" for fuel		79 56
" for supplies		5 00
" for repairs		23 35
Total	$	2,043 99

HANCOCK SCHOOL.

Miss I. M. Welch, Principal.

Corner Hancock and Fourteenth avenues.

Paid teachers	$	2,170 00
" janitor		306 00
" for fuel		142 31
" for supplies		8 21
" for repairs		62 81
Total	$	2,689 33

HICKEY SCHOOL.

Miss Clara E. Cogger, Principal.

Corner Eighteenth street and McGraw avenue.

Paid teachers	$	1,358 00
" janitor		306 00
" for fuel		70 48
" for trees		45 00
" for supplies		8 00
" for repairs		57 87
Total	$	1,872 35

HIGH SCHOOL.

Mr. F. L. Bliss, Principal.

Corner State and Griswold streets.

Paid teachers	$	32,825 00
" janitor		1,580 15
" for fuel		857 90
" for graduating exercises		147 32
" for supplies		1,161 12
" for repairs		718 40
" for furniture		181 62
Total	$	37,471 51

HOUGHTON SCHOOL.

Miss A. M. Joyce, Principal.

Corner Sixth and Abbot streets.

Paid teachers	$	8,750 00
" janitors		750 00
" for fuel		335 56
" for supplies		40 58
" for piano and furniture		186 31
" for repairs		237 61
Total	$	10,300 06

HUBBARD SCHOOL.

Miss H. C. Park, Principal.

Twenty-fifth street, near Porter street.

Paid teachers	$	4,126 25
" janitor		420 00
" for taxes		42 08
" for fuel		177 51
" for supplies		12 21
" for repairs		94 78
Total	$	4,872 83

IRVING SCHOOL.

Miss R. Holbrook, Principal.

Willis avenue, near Woodward avenue.

Paid teachers	$	10,283 12
" janitor		750 00
" for fuel		545 54
" for repairs		189 80
" for piano		145 05
" for trees		18 00
" for supplies		25 00
Total	$	11,956 51

JACKSON SCHOOL (Old.)

Miss. M. L. Redmond, Principal.

Larned street east, near Dubois street.

Paid teachers	$	4,300 00
" janitor		420 00
" for fuel		282 48
" for supplies		12 00
" for repairs		210 75
Total	$	5,225 23

JACKSON SCHOOL (NEW.)—Not completed.

MISS M. L. REDMOND, Principal.

Fort street east, near Chene street.

Paid for lots	$	18,000 00
" for mason work		3,779 07
" for cut stone work		1,246 50
" for carpenter work		1,263 10
" for iron work		43 74
" for draftsmen		150 80
" for iron		33 18
" for heating and ventilating apparatus		1,760 00
" for inspecting		64 00
" for bill posting		12 50
Total	$	21,352 89

JEFFERSON SCHOOL.

MR. F. W. MOE, Principal.

Corner Selden avenue and Crawford street.

Paid teachers	$	11,442 50
" janitor		810 00
" for iron		132 65
" for piano		197 75
" for fuel		398 77
" for supplies		29 70
" for alterations		10,281 54
Total	$	23,292 91

JOHNSTON SCHOOL.

MISS L. C. RICHARDSON, Principal.

Waterloo street, near Dubois street.

Paid teachers	$	1,885 00
" janitors		306 00
" for fuel		76 13
" for supplies		8 00
" for repairs		82 85
Total	$	2,357 98

LINCOLN SCHOOL.

Mr. James Kennedy, Principal.

Corner Antoine and Kentucky streets.

Paid teachers	$	4,413 75
" janitor		600 09
" for fuel		391 66
" for supplies		25 15
" for piano		181 77
" for trees		1 80
" for repairs		93 97
Total	$	5,708 10

LIVERNOIS AVENUE SCHOOL.

Miss E. S. Proctor, Principal.

Livernois avenue, near Michigan avenue.

Paid teachers	$	1,225 00
" janitor		180 00
" for fuel		121 55
" for supplies		5 00
" for repairs		34 94
Total	$	1,566 49

McKINSTRY SCHOOL.

Miss K. Moynahan, Principal.

Corner McKinstry and McMillan avenues.

Paid teachers	$	2,987 50
" janitors		489 00
" for fuel		253 78
" for supplies		8 00
" for repairs		146 61
Total	$	3,884 89

MIAMI AVENUE SCHOOL.

Mr. M. J. Whitney, Principal.

Miami near Gratiot avenues.

Paid teachers	$	4,000 00
" janitor		780 00
" for fuel		357 06
" for supplies		116 05
" for repairs		171 49
" for furniture		72 00
" for trees		16 20
" for heater		210 00
Total	$	5,722 80

NEWBERRY SCHOOL.

Mr. R. A. Nolan, Principal.

Twenty-ninth street, near Visgar street.

Paid teachers	$	5,615 72
" janitors		637 00
" for fuel		331 08
" for supplies		20 85
" for repairs		5 08
" for taxes		6 70
" for carpenter work		2,763 31
" for painting and glazing		465 87
" for plastering		789 65
" for furniture		1,309 56
" for iron work		103 36
" for drafting		3 40
" for mason work		248 00
" for cut stone work		102 70
" for galvanized iron work		8 49
Total	$	12,410 80

NICHOLS SCHOOL.

Miss Eliza S. Foote, Principal.

Elm street, near Seventh.

Paid teachers	$	4,512 50
janitor		420 00
coal		162 94
repairs		107 41
wood and kindling		21 39
Plumbing		13 20
Water tax		12 00
Hardware		4 00
Lumber		2 70
	$	5,256 14

NORVELL SCHOOL.

Miss Martha Baldwin, Principal.

Arndt street, near Campau ave.

Paid teachers	$	8,616 12
janitor		810 00
coal		480 25
repairs		367 99
lumber		62 15
balance on piano		61 40
wood and kindling		29 25
hardware		24 63
brick		24 25
water tax		24 00
repairs to boiler		5 31
	$	10,505 35

JOHN OWEN SCHOOL.

Miss K. E. Lenaghan, Principal.

Corner Myrtle and Thirteenth streets.

Paid teachers	$	5,055 00
" janitor		542 75
" for fuel		271 76
" for piano		159 22
" for supplies		18 00
" for repairs		137 93
Total	$	6,284 66

PITCHER SCHOOL.

Miss I. F. Thirkell, Principal.

Sullivan avenue, near Ash street.

Paid teachers	$	8,475 00
" janitor		750 00
" for fuel		357 92
" for supplies		24 00
" for repairs		138 29
Total	$	9,745 21

POTTER SCHOOL.

Miss Maud Burrows, Principal.

Tillman avenue, near Myrtle street.

Paid teachers	$	2,982 50
" janitor		420 00
" for fuel		195 04
" for supplies		18 00
" for repairs		120 54
" for taxes		22 77
Total	$	3,758 85

PALMER SCHOOL—Not completed.

Horton avenue, neer Brush street.

Paid for lots	$	3,458 50
" for mason work		5,016 00
" for carpenter work		3,391 07
" for cut stone work		940 50
" for galvanized iron and tin work		843 60
" for plastering		1,092 50
" for painting and glazing		266 75
" for heating and ventilating		2,221 58
" for plumbing		102 09
" for drafting plans		254 00
" for labor		438 29
" for iron		59 50
" for inspecting		72 00
Total	$	18,156 38

RUSSELL SCHOOL.

Mr. George E. Parker, Principal.

Russell street, near Elliott street.

Paid teachers	$	8,935 00
" janitor		540 00
" for coal		250 65
" for labor		95 56
" for wood		27 25
" for water tax		16 00
" for sub janitor		7 50
" for plumbing		2 91
" for piano cover		2 75
Total	$	4,877 62

ROBERTS SCHOOL.

Mary J. Latour, Principal.

Adelaide street, near Beaubien street.

Paid for carpenter and joiner work	$	3,685 95
" for teachers		2,546 50
" for plastering and concreting		1,400 00
" for galvanized iron, tinning and slating		1,087 47
" for heating, ventilating and dry closets		912 50
" for seats		874 22
" for labor		836 86
" for painting and glazing		657 00
" for mason work		624 59
" for janitor		405 00
" for ceal		237 15
" for lumber		138 89
" McClun & Elliott		132 00
" for fittings		90 71
" for bell		85 00
" for cut stone work		62 00
" for hardware		48 94
" for iron		48 90
" for castings		85 91
" for teaming		33 53
" for wood		23 26
" for trees		21 60
" for shades		21 41
" for water tax		19 50
" for slate ruler		2 00
" for penant		1 00
Total	$	14,031 89

TAPPAN SCHOOL.

Miss H. W. McKerrow, Principal.

Corner Thirteenth and Marantette street.

Paid teachers	$ 10,979	87
" janitor	960	00
" for fuel	557	11
" for furniture	207	25
" for supplies	35	00
" for repairs	364	75
Total	$ 13,103	48

TILDEN SCHOOL.

Miss E. M. Sheeran, Principal.

Corner Seventh street and Kirby avenue.

Paid teachers	$ 7,990	62
" janitor	720	00
" for fuel	313	50
" for supplies	25	00
" for repairs	193	57
" for pianos	472	05
" for fire accident	1,260	78
Total	$ 10,975	52

TROWBRIDGE SCHOOL.

Miss M. A. King, Principal.

Forrest avenue, near Antoine street.

Paid teachers	$ 7,415	00
" janitor	720	00
" for fuel	275	66
" for supplies	40	00
" for furniture	35	05
" for repairs	307	27
Total	$ 8,792	98

VAN DYKE SCHOOL.

Mr. C. G. G. Paine, Principal.

Corner Field avenue and Agnes street.

Paid teachers	$	5,728 00
" janitor		540 00
" for fuel		286 88
" for supplies		16 21
" for piano		276 19
" paving		436 92
" for repairs		209 18
Total	$	7,493 38

WASHINGTON SCHOOL.

Mr. C. F. Daniels, Principal.

Beaubien street, near Madison avenue.

Paid teachers	$	9,258 75
" janitor		720 00
" for fuel		427 41
" for supplies		27 20
" for piano		74 73
" for repairs		298 68
Total	$	10,806 77

WEBSTER SCHOOL.

Mr. C. B. Hall, Principal.

Twenty-first street, near Howard street.

Paid teachers	$	12,852 50
" janitors		1,159 08
" for fuel		427 14
" for supplies		38 10
" for piano		175 00
" for smoke consumer		150 00
" for repairs		451 79
Total	$	15,253 61

WILKINS SCHOOL.

Miss Harriet Marsh, Principal.

Porter street, near Second avenue.

Paid teachers	$	9,412 50
" janitor		720 00
" for fuel		301 63
" for supplies		25 35
" for furniture		148 25
" for repairs		588 14
Total	$	11,195 87

WILLIAMS SCHOOL—Not completed.

Forest avenue, near Moran street.

Paid for lots	$	4,908 00
" for drafting plans		362 10
" for mason work		8,908 14
" for carpenter work		3,476 60
" for galvanized iron and cornice work		1,075 25
" for cut stone work		684 55
" for plastering		1,088 00
" for iron work		44 83
" for heating and ventilating		2,785 14
" for blacksmithing and iron		66 03
" for plumbing		12 80
" for labor		439 22
Total	$	23,950 66

BELLEFONTAINE NIGHT SCHOOL.

Paid teachers	$	431 75
" janitor		122 00
" for supplies		16 78
Total	$	570 53

DUFFIELD NIGHT SCHOOL.

Paid teachers	$	1,027 50
" janitor		160 00
" for supplies		24 75
Total	$	1,212 25

HIGH NIGHT SCHOOL.

Paid teachers	$	2,237 00
" janitor		162 50
" for supplies		201 41
Total	$	2,600 91

NEWBERRY NIGHT SCHOOL.

Paid teachers	$	479 00
" janitor		122 00
" for supplies		15 10
Total	$	616 10

NORVELL NIGHT SCHOOL.

Paid teachers	$	1,376 25
" janitors		160 00
" for supplies		40 90
Total	$	1,577 15

PITCHER NIGHT SCHOOL.

Paid teachers	$	1,430 50
" janitor		160 00
" for supplies		62 56
Total	$	1,716 06

TROWBRIDGE NIGHT SCHOOL.

Paid teachers	$	740 00
" janitor		160 00
" for supplies		73 98
Total	$	973 98

VAN DYKE NIGHT SCHOOL.

Paid teachers	$	581 50
" janitor		160 00
" for supplies		13 74
Total	$	755 24

WEBSTER NIGHT SCHOOL.

Paid teachers	$	710 00
" janitor		160 00
" for supplies		27 11
Total	$	897 11

TRAINING CLASS.

Paid teachers	$	4,290 00
" for supplies		286 95
Total	$	4,576 95

SPECIAL.

Paid teachers	$	5,800 00

SUPERINTENDENT'S OFFICE.

Paid clerk's salary	$	1,000 00
" for supplies		102 44
Total	$	1,102 44

SECRETARY'S OFFICE.

Paid for supplies	$	79 05

SUPERVISOR'S OFFICE.

Paid for supplies	$	104 82

STORE ROOM.

Labor	$ 675 19
Brushes	596 63
Hardware	467 93
Clocks	324 48
Matting	209 77
Soap	93 08
Salsoda	77 60
Ash buckets	61 20
Lumber	59 26
Brooms	57 50
Stationery	54 22
Crayons	51 00
Cotton cloth	46 15
Erasers	42 95
Oil	29 20
Disenfectants	37 42
Paint	32 25
Shovels	29 50
Map swabs	27 36
Ink mterials	22 50
Ink cans	16 50
Baskets	11 00
Lamp wick	8 75
Matches	8 00
Sponges	7 25
Map wringers	6 50
Toilet paper	6 00
Halyards	5 60
Glass cutter	5 00
Oil cans	3 50
Fuel	3 12
Ink wells	3 00
Furniture	2 89
Rattans	1 25
Glassware	50
Total	$ 3,094 05

SHOP.

Labor	$	1,854 83
Paint		1,123 78
Labor		607 00
Seats		348 03
Lumber		329 31
Oil		227 81
Stationery		75 00
Sand		36 41
Telephone		33 28
Freight		21 48
Brick		18 00
Slate		8 75
Pump		8 13
Cement		5 10
Water tax		5 00
Stove repairs		4 80
Halyards		3 56
Canvas		2 94
Plaster		2 00
Twine		1 05
Coal		63
Acid (plumber's)		37
Total	$	4,717 26

MISCELLANEOUS.

Books and stationery	$ 9,259 92
Clerks	2,840 91
Fire extinguishers	1,905 00
Printing	1,895 44
Furniture	1,706 11
Office rent	1,283 33
Teaming	610 24
Labor	541 49
Janitor for offices	272 50
Supplies	241 48
Livery	217 75
Advertising	160 04
Bookbinding	117 00
Drafting	108 20
Lumber	105 47
Building Inspector	63 00
Trip to Lansing	49 00
Hardware	43 31
Ice	10 85
Total	$ 21,480 53

RECAPITULATION.

Name of School.	Amt. Expended.
Bagley	$ 4,851 70
Barstow	19,121 56
Bellevue	2.392 13
Bellefontaine	7,520 16
Bishop	22,496 71
Brownson	4.252 22
Campbell	4,438 41
Cass	25,027 40
Chaney	4,166 79
Clay	6,455 00
Clinton	6,498 26
Craft	3,006 33
Custer	1,735 48
Dickinson	11,609 03
Duffield	22,504 14
Everett	9,366 12
Farrand	5,223 13
Ferry	4,794 14
Firnane	4,428 33
Franklin	4,233 55
Garfield	2,379 46
Gratiot	2,043 99
Hancock	2,689 33
Hickey	1,872 35
High	37,471 51
Houghton	10,300 06
Hubbard	4,872 83
Irving	11,956 51
Jackson (old)	5,225 23
Jackson (new)	21,352 89
Jefferson	23,292 91
Johnson	2,357 98
Lincoln	5,708 18
Livernois	1,556 49
McKinstry	3,884 89
Miami Avenue	5,722 80
Newberry	12,410 80

Name of School	Amt. Expended.	
Nichols School	$5,256 14	
Norvel School	10,505 35	
John Owen	6,284 [illegible]	
Pitcher	$ 9,745 21	
Potter	8,758 85	
Palmer	13,156 38	
Russell	4,877 62	
Roberts	14,031 89	
Tappan	13,103 48	
Tilden	10,975 59	
Trowbridge	8,792 98	
Van Dyke	7,493 88	
Washington	10,806 77	
Webster	15,258 61	
Wilkins	11,195 87	
Williams	23,950 66	
Bellefontaine Night School	570 58	
Duffield Night School	1,212 25	
High Night School	2,600 91	
Newberry Night School	616 10	
Norvell Night School	1,577 15	
Pitcher Night School	1,716 06	
Trowbridge Night School	973 98	
Van Dyke Night School	755 24	
Webster Night School	897 11	
Training Class	4,576 95	
Special Teachers	5,800 00	
Superintendent's Office	1,102 44	
Secretary's Office	79 05	
Supervisor's Office	104 82	
Store Room	3,094 05	
Shop Account	4,717 26	
Miscellaneous accounts	21,480 53	$ [illegible]
Grand total		$ 555,231 60

Respectfully,

JOHN R. KING,

Secretary.

FORTY-NINTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1892



FORTY-NINTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1892.

———

DETROIT:

DETROIT PUBLISHING CO., PRINTERS.

1892.

THE NEW YORK
PUBLIC LIBRARY
11 2 '22 C1
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

As in the case of the Grammar and Primary appropriations, no delay should be permitted, for long before the shortest possible time in which these three buildings can be ready for occupancy, rented quarters will be necessary for the large number that cannot be possibly accommodated in the present building.

There is another very important feature in connection with school buildings, and to which I earnestly call your attention: the ventilation of some of the buildings. The ones most in need of attention are the Cass, Irving, Houghton, Tappan, Webster, Pitcher, John Owen, Norvell and Clinton. In these buildings there is no ventilation whatever, when taken in connection with the number of pupils congregated. A strong appeal should be made to the city authorities for enough funds to put all these buildings in a perfect sanitary condition.

PROMOTIONS.

This is one of the most important parts of a school system, and should receive the careful consideration of every educator in the land, for it wields a great influence not only in so-called technical, but the more important one, the moral education of a child.

The system of promotions upon recommendation which may be made, at any time, during the term, and thus avoid the just criticisms often made upon the Public School system of forcing all the differently constituted minds into one common mould, based upon daily and test-work, which is verified by the principal, who receives a monthly report upon each pupil, and who carefully watches the progress of every individual, supplemented by a final examination for all regularly promoted pupils who for some unavoidable reason were not able to reach the required standing for promotion upon recommendation,

REPORT OF THE PRESIDENT.

THE PRESIDENT'S REPORT.

To the People of Detroit:

Herewith we submit for your consideration the report of the schools for the past year, in order that you may form an estimate of our stewardship. We recognize fully that it is your prerogative to inquire into the minutest details of the management of your schools. With that object in view, we submit, year by year, a detailed report of every department of school work; and invoke your intelligent consideration thereof.

SCHOOL ACCOMMODATIONS.

For several years past we have suffered for want of school accommodations. I am pleased to be able to report that we have now reached a position where we have sufficient school accommodation for nearly all who apply for admission. There are at present half day schools in but very few buildings, and only in the lowest grades of these, and as some of the best educators seem to be of the opinion that half a day's attendance for a small child in school is preferable to an entire day's attendance, I consider myself justified in making the above statement.

HIGH SCHOOLS.

We are greatly in need of more High School accommodation. The time is not far distant when we are to have three new high schools. Our high schools are the completion and the crown of our public school system.

There are still among us men who cry "Halt!" when we attempt to teach the child that our own city is not all that there is in this world, or that our country has a past or a future. These men preach to us that the highest good, and the only good in common school education, is attained by teaching the (so-called) three "R's" and would have us teach our children nothing but reading, writing and 'rithmetic, and they point with pride to the fact that some one, probably one out of a million, whose early education was so limited has risen to greatness and prominence. They view the science of education through the same glasses that adorned the noses of their own country school masters in the time when the only requirements demanded of the instructor were an ability to tell good stories and an abundance of muscle wherewith to drive the three "R's" into the hard craniums of their disciples; they live among us, yet grow not with us. But we are told that we are not only educating unwisely, but also that we are spending money for purposes not warranted by the Constitution and Statutes of our State: that we are exceeding our powers and abusing the grand trusts which are placed upon us when we go beyond the three "R's." The narrowness or such views may be shown by examining a few of the laws and some of the decisions of our courts.

During the past few years the tendency has been too much toward the practical; the ideal has been thrown aside, and everything is being measured by a gold and silver standard. Educators even are being whirled down the stream, and learning is being measured by its value in dollars and cents.

MANUAL TRAINING.

The subject of Manual Training in our Public Schools is *the* subject which to-day demands the most careful considera-

tion, and the wisest thought of those to whom the direction of our schools has been delegated. Much attention and discussion has been given to this question during the year, and it was determined not to make a beginning this present year. I would most earnestly recommend that a convenient room be furnished with benches and tools for pupils of the first grade in the High School.

The greatest benefit of this work, in my opinion, is the habit of industry formed, and the dignifying of labor. The study of things, rather than of words, and the application of philosophic principles to daily labor is by no means to be overlooked.

But how far this work should go is an all-important question. This bench work should not begin much earlier than the High School age. Here the use of the various tools can be efficiently taught with comparitively small expense. Whether the forge and all kinds of working in iron are necessary, may well awaken discussion.

The expense involved would be great, and without a fair return in the increased power and intelligence of the pupil, would inevitably fail of popular approval.

SCHOOL DISCIPLINE.

I am pleased to note that the number of cases of corporal punishment is on the decrease. The abolition of corporal punishment would mark a wonderful change in the discipline of our public schools. So great would be the success of the moral suasion idea that even the most bitter opponents would be converted.

The rod is a bar between teacher and pupil. Where corporal punishment is in use, the teacher is regarded as an enemy, and where it is not in use the pupil is made to feel that

the teacher is his associate, assisting him in his lesson by kind advice, and the consequence is friendly feelings, better conduct and more thorough work. Though this is true, we must admit that in so large a city as ours, there are some pupils among those who attend our schools, who are, or seem to be, so depraved that it is impossible to control them entirely by kindness. Suspension should be the last resort. There is not much doubt that if one would follow the careers of suspended children, he would find them following the lowest walks in life. Their childhood is spent in the street, their youth very likely in the reform school, and the majority end their existence in the dungeons of the penitentiary. The same may be said of the career of others who are kept from school by parents on account of their conduct.

In view of these facts, gentlemen. I wish to suggest to you for your consideration, the advisibility of establishing reformatories in connection with the public schools. These are to be additional to our present efficient Truant School on Miami avenue. The additional expense of such a system would be very small in proportion to the good to be accomplished. No separate buildings would be needed, and no additional teachers. One room in one school building would be sufficient for a large district; the size of the district to be in proportion to the number of those unwilling to be restrained by the kind influence of the regular teachers and in the rooms so set aside.

I would recommend that such system of reform be pursued as should be advised by this Board.

There is no doubt that many teachers in our schools will be found capable and willing to undertake this work, and the only possible expense will be a small increase in the salary of such teacher.

Such a system presents so many advantages over the prison reform school, that it appears thoroughly practicable.

The pupils are reformed before having an opportunity to become hardened by the associations of the street or of those met in the prison reform school. Here they enjoy the companionship of good classmates, while the fear of disgrace by being separated from the regular classes would largely influence them for the better. I think that by establishing such a system, you would do much toward perfecting the conduct of our schools, and at the same time grand progress would be made toward accomplishing this prison reform which has been occupying such large space of public attention in the last few years.

QUALIFICATIONS OF TEACHERS.

I am indebted to the Principal of one of our schools for a suggestion which I consider of sufficient importance to lay before you. Most, if not all, of our teachers are now taken from the graduates of our High School. After graduating they must pass an examination prescribed by the Board as to their qualifications to enter the Normal Training School, and they are passed upon in accordance with their ability to answer a certain percentage of the questions put to them. Such examination takes but a short time, and at best can be only superficial. No account is ever taken of the past history of the candidate; thus it may easily happen that a good scholar may by chance present a poor paper, while at the same time a very poor scholar, by a trick of the memory, may pass a good examination. Now if the record kept by the principal of the High School as to each scholar were taken into consideration by the Board when passing upon the qualifications of the candidates, a better selection might be made and greater justice would be meted out. Again, the scholars understanding that

their conduct and their proficiency while in school would be taken into consideration by the Board when they present themselves as applicants for the position of teacher, would be spurred on to better efforts and to better scholarships. I therefore recommend to the Board to adopt a rule whereby the scholarship and the conduct of the young ladies while attending our High School should be taken into consideration upon their examination for teachers.

SCHOOL LIBRARIES.

The well selected Circulating School Libraries I regard as among the most efficient aids in securing the real purpose of the school. But the use of this library to the school does, and must, depend upon the Principal of the school. These books are of no worth, when carefully secured under lock and key; they are to be given to the pupils, read and discussed by them under the teachers' subdivision; their contents are to be appropriated; the times for drawing and returning books systematized and carefully noted; or the money set apart by the Board will be worse than wasted, and the school remain as dull and unthinking as before.

PHYSICAL CULTURE.

During the past two years a teacher of physical culture has given instruction to all the pupils. The good results of their training is already, at the time of this writing, plainly perceptible.

No action of the Board, as seems to me, has been more wisely taken than this of an efficient system of Physical culture.

SINGING.

Singing in the Grammar and Primary grades was very successfully taught, and the number of pupils engaging in it

was largely increased. Music and malice cannot exist in the soul at the same time.

DRAWING.

The importance of Drawing in the public schools has often been urged, and can hardly be any longer a subject of discussion. In almost every branch of study pursued is its influence felt for good, and out of the school-room no workman can hope to advance beyond the position of the common laborer without some skill with the pencil and crayon, with the attendant culture and power of discernment.

PENMANSHIP.

Pleasing progress, I think, has been made in penmanship. The pen is used with as much success in the third grade as later, and by its use is avoided much of cramping of the fingers acquired by the use of the pencil.

NORMAL TRAINING SCHOOL.

With this year closes the eleventh year of this school. This school is now the main source from which the schools are supplied with instructors in the primary grades, and these young teachers almost without exception render excellent service, except in discipline. I would recommend that this school be transferred to a larger building where the young ladies could have practice in managing a school-room of ordinary size.

EYES.

In the old school-rooms, and we need not go far back for them, the light was often so insufficient that much harm undoubtedly resulted to the eyes of the children. But in our newer buildings so much thoughtful attention has been given to this subject, that the evil no longer exists there. Pupils have been allowed to study with too little regard to position,

and with the object too near the eye; perhaps with the result of myopia in some cases, but by no means, in my judgment, to the extent often charged. Much attention has been given to the subject, and in many of our schools the result is all that good sense, or good science can demand.

During the past year I have visited the schools of several of our neighboring cities, and in my judgment, our school system is second to none in the country.

I thank you, gentlemen, for the honor you have conferred upon me by having elected me to the position of your presiding officer, and for all the courtesies you have shown me during the past year.

BENJAMIN R. HOYT,

President.

REPORT OF THE SUPERINTENDENT.

REPORT OF THE SUPERINTENDENT.

To the Board of Education:

GENTLEMEN: I have the honor to present herewith the forty-ninth annual report of the public schools of this city.

At the close of last year there were 51 school buildings, in commission. Of this number, two were abandoned as undesirable from age and as to location. Four new ones were opened, making a total at close of this year of 53, and are classified as follows:

High School	1
Normal Training, Ungraded	1
Full Grammar Grades	20
Primary	31
Total	53

The following table will give their location, etc.:

Location, No. of Rooms, Seating Capacity, Average Attendance, Etc

SCHOOLS.	LOCATION.	NUMBER OF ROOMS.	NUMBER OF SEATS.	AVERAGE ATTENDANCE FOR THE YEAR.	AVERAGE NUMBER OF TEACHERS FOR THE YEAR.	AVERAGE NUMBER OF PUPILS TO THE TEACHER.
Bagley	Fourteenth and Pine	6	351	295	7	38
Barstow	Larned and Riopelle	12	579	487	14	37
Bellefontaine	Fort near Morrill	10	615	506	12	42
Bellevue	Bellevue near Champlain	3	152	132	3	44
New Bellevue	Bellevue near Waterloo	1	55	38	1	38
Bishop	Winder near Rivard	22	1193	969	25	39
Brownson	Maple near Chene	6	307	290	7	41
Campbell	St. Aubin and Alexandrine	6	301	227	4	56
Cass	Grand River and Second	21	1070	929	25	37
Chaney	Sullivan and Linden	6	331	261	7	37
Clay	Pitcher near Cass	8	407	323	9	36
Clinton	Clinton near Rivard	8	445	360	9	40
Craft	Vinewood and Ash	4	243	161	4	40
Custer	Hammond near Ranspach	2	125	49	2	24
Dickinson	Twelfth and Brigham	8	392	278	9	31
Duffield	Clinton near Chene	16	894	765	19	40
Everett	Fort near Hastings	12	626	408	13	32
Farrand	Harper and John R	6	343	230	7	33
Ferry	Ferry and Jos. Campau	8	391	235	9	26
Firnane	Fort near McDougall	6	363	244	6	41
Franklin	Seventh and Pine	6	345	245	7	37
Garfield	Rivard and Frederick	4	207	69	3	23
Hancock	Fourteenth and Hancock	4	234	142	4	37
Hickey	Eighteenth and McGraw	4	197	108	4	27
Houghton	Sixth and Abbott	12	589	411	14	30
Hubbard	Twenty fifth and Labrosse	8	334	263	7	38
High	State and Griswold	4	956	911	36	26
Irving	Willis near Woodward avenue	12	666	551	15	37
Jackson	Fort near Chene	8	417	268	8	34
Jefferson	Selden and Crawford	10	795	668	18	37
Johnston	Waterloo near Dubois	4	222	193	4	48

Location, No. of Rooms, Seating Capacity, Average Attendance, Etc.—(Continued.)

SCHOOLS.	LOCATION.	NUMBER OF ROOMS.	NUMBER OF SEATS.	AVERAGE ATTENDANCE FOR THE YEAR.	AVERAGE NUMBER OF TEACHERS FOR THE YEAR.	AVERAGE NUMBER OF PUPILS TO THE TEACHER.
Lincoln	Brady and Antoine	8	454	347	9	37
Livernois	Livernois near Michigan	2	117	75	2	37
Miami	Miami near Wilcox	4	114	90	5	18
McKinstry	McKinstry and McMillan	8	412	254	8	32
Newberry	Twenty-ninth near Vinear	12	559	417	14	30
Nichols	Elm near Seventh	6	305	253	7	36
Normal	Miami near Wilcox	5	148	121	5	24
Norvell	Arndt and McDougall	12	646	600	14	43
John Owen	Myrtle and Thirteenth	8	411	332	9	37
Palmer	Horton near Beaubien	8	397	237	7	34
Pitcher	Sullivan near Butternut	12	570	528	15	35
Potter	Tillman near Myrtle	6	295	237	7	34
Roberts	Adelaide near Antoine	8	392	242	8	30
Russell	Russell and Elliott	8	438	298	9	33
Tappan	Thirteenth and Marantette	16	826	669	18	37
Tilden	Kirby and Seventh	12	717	666	15	44
Trowbridge	Forest near Antoine	12	604	413	13½	31
Van Dyke	Field and Agnes	8	469	394	11¼	34
Washington	Beaubien near Madison	12	623	511	14	36
Webster	Twenty-first near Howard	19	1052	902	21	43
Wilkins	Porter near Second	12	619	421	13	32
Williams	Canfield and Mt. Elliot	12	610	260	8¼	31

Total number of rooms	461
Total number of seats	24,725
Average attendance for year	19,241
Total number of teachers	547¼
Average number of pupils to each teacher	1853

The total number of available sittings at the close of last year was 22,815; which number, added by the opening of new buildings, viz.: Jackson, Williams, Palmer and New Bellevue, and deducting number in vacated buildings, viz.: Gratiot and Jackson, leaves a total at close of year of 24,725, an increase of 910. The estimates allowed for new buildings will very materially relieve those sections that are overcrowded, provided there is no delay in the building of them. A large portion of the sittings thus furnished could be filled at beginning of next year.

The estimates allowed for three high schools will meet the necessity that has been apparent for the past five years. Every foot of available space in the present high school building, including cloak rooms, has been utilized for recitations. Just what shall be done with the increase until the new buildings are completed is impossible for me to say. The prospect at the opening of this school, September 1st, is that the ninth grade alone will furnish over 500 pupils, with only a packed seating capacity of 450.

The Central building should at least seat 1,000 pupils, and situated not south of Willis avenue, as the larger portion of the present enrollment live in the territory bounded by Trumbull avenue on the west, Russell street on the east, High street on the south, and the old city limits on the north.

The Western building should be in the vicinity of the Boulevard and Dix road, as that is near the middle of the western part high school population. This will provide accommodation for any increased territory for the next 15 or 20 years.

The Eastern building should be in the vicinity of Mt. Elliot, south of Mack, thus accommodating both north-eastern and eastern parts of the city.

As in the case of the Grammar and Primary appropriations, no delay should be permitted, for long before the shortest possible time in which these three buildings can be ready for occupancy, rented quarters will be necessary for the large number that cannot be possibly accommodated in the present building.

There is another very important feature in connection with school buildings, and to which I earnestly call your attention: the ventilation of some of the buildings. The ones most in need of attention are the Cass, Irving, Houghton, Tappan, Webster, Pitcher, John Owen, Norvell and Clinton. In these buildings there is no ventilation whatever, when taken in connection with the number of pupils congregated. A strong appeal should be made to the city authorities for enough funds to put all these buildings in a perfect sanitary condition.

PROMOTIONS.

This is one of the most important parts of a school system, and should receive the careful consideration of every educator in the land, for it wields a great influence not only in so-called technical, but the more important one, the moral education of a child.

The system of promotions upon recommendation which may be made, at any time, during the term, and thus avoid the just criticisms often made upon the Public School system of forcing all the differently constituted minds into one common mould, based upon daily and test-work, which is verified by the principal, who receives a monthly report upon each pupil, and who carefully watches the progress of every individual, supplemented by a final examination for all regularly promoted pupils who for some unavoidable reason were not able to reach the required standing for promotion upon recommendation,

will not only increase the scholarship of the average individual, but it will also strengthen his moral character. A careful comparison of this plan with that of the one which promotes only by a final examination, in which the injustice is patent to every child, will in every instance convince one that another advance has been made in the right direction, when the former plan shall be adopted generally.

SUPERVISION.

This is one of the most important parts of school work, and owing to the constant changing of teachers each term, continual watchfulness on the part of the superintendent, those engaged in this special work and the principals, is very necessary in order that all the progressive educational ideas may be introduced and carried out.

In all Grammar, and some Primary schools, the principal's time is so divided as to give the larger portion to supervision, while in the smaller schools the principal's time is entirely occupied in teaching. This condition of affairs necessitated the employment of some one to take charge of the Primary Grades, and the wisdom of this action, as well as the selection of the person, has manifested itself in the increased efficiency of this most important division of our school system.

The following is a report from the supervisor of these grades, showing the work that is being done at the present time :

REPORT OF THE SUPERVISOR OF PRIMARY GRADES.

REPORT OF THE SUPERVISOR OF PRIMARY GRADES.

To Superintendent W. E. Robinson:

The following report of the Primary Department of the Detroit Public Schools is respectfnlly submitted:

In directing the educational work of this department during the past year, three means have been employed: teachers' meetings, visits by the superintendent, and help given to teachers individually during office hours. In visiting schools, more time has been spent with some teachers than with others, because of a desire to render assistance where it was most needed. During office hours, from 4 to 5 P. M. each day, many teachers have availed themselves of the opportunity to receive help on any part of their school work.

TEACHERS' MEETINGS.

These meetings, thirty-five in number, have been held at the High School building. The teachers of this department, including the first, second, third and fourth grades, have been divided into four sections, each section including all teachers of a certain grade. Teachers' meetings have been held weekly, and beginning with the First Grade Section, have followed each other in regular succession.

Beginning in September, these meetings were held on Monday, from 4 to 6 P. M. Teachers in the outlying districts had permission to dismiss early enough to allow them to reach the High School at this hour. In October, permission

was given to hold these meetings on Friday, from 1.30 to 4 P. M., and from that time until after the spring vacation in April, these meetings were held in the afternoon. After this vacation, the meetings were again held from 4 to 6 P. M.

The teachers have been very prompt and regular in their attendance at these meetings; they have given thoughtful attention to all that has been said, and have been earnest and faithful in their efforts to carry out all directions and suggestions. Our teachers, as a body, are willing, intelligent workers, devoted to the best interests of their pupils and the schools.

The actual work of teaching the children is done by the grade teacher. It is she who comes in daily and hourly contact with the pupils, and thus becomes the most powerful factor in their school-room education. To do this work well she must possess scholarship and culture; she must have the power to think for herself, to be independent and original in her work. The first requisite to good schools is that our teachers possess scholarship and strength of character. Anything which promotes the growth of the individual teachers furthers the advancement of our schools. Our children cannot rise above their teachers in either intellectual attainments or moral strength. Gradually the thought is forcing itself upon the world to-day that the individual grade teacher is the power in our public school education, and hence the efforts that are being made to give these teachers every opportunity for growth and improvement. To teach the teachers has been recognized as an important feature in the work of the Public School system.

In all other departments of nature, growth is subject to law, and child mind is no exception to the general rule; its growth is determined by certain laws and conditions, and the teacher must have that insight into child nature which enables

her to furnish the proper conditions and environment for child growth and development.

Education is gradually being reduced to a science, and mere knowledge of the branches to be taught is not regarded as sufficient equipment for the work of teaching. Professional training has significance to a teacher as well as to a nurse, a doctor, a lawyer or a minister.

The purpose of the Grade Meetings has been to unify and harmonize the work in the schools, and to stimulate, assist and encourage the teachers.

The discussions have been of a practical nature, and have, I trust, led to broader and stronger work in the schools. The work in each section has been confined largely, though not entirely, to the work of that particular grade. In order to do good work, a teacher must know not only the work of her own grade, but also something of that which precedes and follows it; she must be able to see that part of the work which she does in its relation to the work of the school as a whole.

At each grade meeting the supervisors of special work have met the teachers and given instruction with reference to the work in these branches. Much good work has been done in the schools in Music, Penmanship, Form and Drawing and Physical Culture.

COURSE OF STUDY.

At your request, some changes have been made in the Course of Study for Primary Grades. The subject of Reading was first considered in the grade meetings, after which the substance of the discussions was condensed, printed, and put in the hands of teachers in the form of the following manual.

DETAILED COURSE IN READING.

LEARNING TO READ.

Reading is a thought process. When we read from a printed page we think the thoughts which the author has there expressed. Learning to think another's thoughts by means of the language in which they are expressed is "Learning to read." This work belongs to the primary school, and the result of our teaching should be the *power* in the child to take the thought from a printed page *easily* and *rapidly*. This power to think another's thoughts through the medium of written language is perhaps the most valuable instrument which can be put into the hands of a pupil, and it is a matter of great importance that he be taught to use it skillfully.

Silent reading, or taking the thought from the printed page is the fundamental process; oral reading is the giving of this thought in the words of the author through oral expression. Oral reading is entirely subordinate to silent reading, when a pupil has once grasped the thought of the author and this thought is clearly defined in his own mind, he will find little difficulty in giving it the proper oral expression. Thought, naturally, controls expression. This is true in our talking, and should be so in our reading.

Oral reading is a complex process; it includes *getting* the thought and *giving* the thought. With little children it is well to separate these two steps and take one step at a time. A child should always have the thought before he attempts to give it by reading aloud.

Getting the thought, or silent reading, is the work of the *eye*. The child already knows when he enters school how to get thought through oral language by using the ear. We

want to teach him to get thought through written language by using the eye.

The written or printed words should be *directly* associated with their corresponding ideas, so that the child can get the thought *directly* through the written language without first translating that written language into oral language. That many children do make this translation is indicated by their using their lips when reading to themselves. Many adults go through the mental process of translating these *sight* symbols of written language into the *sound* symbols of oral language, thus making reading a tedious, laborious process. It is very important that children form correct habits when learning to read.

Every device used in teaching a written word should be a device to hold the child's eye while the written form of the word images itself in his mind. A child should always first get the thought from a written sentence by *looking* at it and not by *hearing* some one else read.

"Reading is thinking;" thoughts are expressed in sentences. A child should read sentences. A thought is the unit of mental action; a sentence is the unit of expression. The sentence and not the word is the whole. "From the whole to the part" is a psychological truth which is just as applicable to the teaching of reading as to that of number, geography or science. Teach the child to read sentences, to talk sentences. Analyse sentences to find the words of which they are composed, and teach these words as *parts* of sentences. Throughout the primary grades emphasize the sentence. Let the work, as far as is possible, be with sentences rather than with isolated words.

SENTENCE METHOD.

With children who have just entered school, it might be well to postpone the beginning of work in reading for about two weeks, and use the time for preparatory conversation lessons. Take some familiar objects, study their form, size, parts, color and uses; have the children express their thoughts about these in complete sentences. Have them use the idioms—I have, I see, it is, and it has. A child should think of a sentence as telling something, and should read a sentence to find out what it tells. For seat-work in connection with these lessons, such work as is suggested on the chart, preparatory to regular slate work, might be given.

FIRST STEP—SENTENCE AS A WHOLE.

I. Have some object (a fan): put it into the hands of the child, and, in reply to a question, obtain from him the answer. "I have a fan." Then, with all eyes upon you, turn to the board and write this sentence in script, every child knowing that the chalk is saying, "I have a fan." Give the fan to different children, and have the chalk say for each of them, "I have a fan."

II. Introduce a number of objects, use the pictures of the objects instead of their names in the sentences and give some days' work with this same idiom—I have. When the child reads the sentence let him hold the object in his hand, so that what he says—I have a fan—is true. One way of knowing that a child has read a sentence is by having him make it true.

III. Place the object where the child can see it, in reply to a question get the answer, "I see a fan." Use these two idioms—I have and I see—until they are known before introducing a third idiom.

IV. Introduce slowly the names of the objects, instead of pictures of them, and teach about ten name words. These words should be selected from the vocabulary of the grade. Always use the articles, a or an, with these name words.

V. Introduce black, pretty, red, the and my. These, with the words already taught, will give a large variety of sentences.

SECOND STEP—ANALYSIS OF SENTENCE INTO WORDS.

Whenever the children begin to analyze the sentences, and thus notice and pick out the separate words in them, they are ready for this step. An observing teacher who studies her children will have no difficulty in knowing when this time comes.

I. Teacher writes, "I have an egg." on the board, and tells as she writes just what she is writing.

II. Have child pick out words; tell which part of sentences says I, black, hat, etc.

As soon as this step has been taken, work may be given on separate words. It is well, however, to always first present a new word in a sentence, rather than alone. If it is taken out of a sentence a child learns to think of that word as part of a sentence, rather than as a whole in itself. If this habit is formed, the child when reading will not be satisfied to see only one word at a time; his eye will naturally seek the sentence to which that word belongs. This habit will aid in making him a sentence reader rather than a reader of separated words.

The work in phonics during this time should be carried on in connection with oral words, and no attempt should be made to analyze a written word into its component letters until the child indicates that he is ready for the step. When he begins

to notice that the first part of rat is different from the first part of mat, or that the last part of cat is different from the last part of can, while the rest of the two words are alike, this shows that he has already begun the analysis of these written words.

In seat-work, sentences rather than words should be used. During the first six or eight weeks of term tracing, pricking, sewing and covering with lentils should be used for busy-work. This prepares the child for the copying of the sentence, which work should then be begun. The teacher's sentences, written for copy, should be models in penmanship.

WORD-WORK.

Children cannot read until they know the meaning of all words in the text and can pronounce them instantly at sight. This thorough understanding of words and familiarity with their written forms is the proper preparation for reading and must be had before reading in any true sense is possible.

In the primary grades one period each day should be devoted to this work. During this time the pupils learn the new words which they should be daily adding to their vocabularies. Success in the reading is largely determined by the thoroughness with which this work is done. The word-work in connection with a reading lesson should, of course, always precede the reading of that lesson.

To teach a word:

1. Bring vividly into consciousness its corresponding idea by means of an object, drawing, picture or conversation. This idea stimulates the mind and prepares it for the written word. The strength of the impression which the written word will make when it is first presented is determined by the amount of interest aroused in this idea. The use of the written word is to

el the idea so that in reading this idea may be brought into nsciousness by the sight of the written word. If we are to ink through the medium of written words, these words must *strongly* associated with *clear* ideas.

II. Present the written form of the word and the proper sociation will be made between the idea and the word, because ey are both in the child's consciousness at the same time.

Present the written form on the blackboard. Children e more interested in seeing a word made, and it is easier to : the attention of the class upon the one word on the board an to have this child attend to this word in the book.

III. Drill upon the word. Repetition is necessary to ccess; the child must look at the word again and again until form is fixed in his mind. Some devices for getting a child look at a word are:

1. Teacher write it on board in different colors, sizes and aces. With small children, colored crayons lend much to e attractiveness of board work.

2. Children trace it in air, on blackboard and on slates.

3. Have children "photograph it;" also cover the word d have children see it by the imagination.

4. Children copy the word.

5. Look at the word, and then write it from memory.

IV. Teach the pronunciation of the word. During the ord-work lesson attention should be given to articulation, unciation, and also to any bad habits in the faulty pronciation.

V. Spell the word orally. In writing the word, write it a whole, and then underline each separate syllable.

VI. Have the children use the word in original oral ntences.

SEAT-WORK.—Teacher has on the blackboard well constructed sentences, in which the new words are used and emphasized by being underlined or brought out in colored crayons. For seat-work following the word-work lesson, children copy these sentences. If time permits, additional drill might be given in writing the new words in lists or putting them into original sentences.

WRITTEN SPELLING.—For spelling, the children write from dictation the sentences containing the new words. These same sentences they have previously written from copy. In addition to the sentences, a list of review words may profitably be given.

Pupils' mistakes should be reduced to the minimum. Good teaching will form the habit of spelling correctly.

In as far as it is possible, make each sentence given in dictation contain some valuable fact.

SILENT READING.

Introduce each lesson with a short talk pertaining to the lesson, thus interesting the child and bringing into his consciousness the things about which he is to read. If the lesson is illustrated, a description of the picture is a good introduction.

"Never allow a child to give a thought until he gets it." It is well to have oral reading preceded by silent reading or thought getting. The teacher questions the children. They understand that the answers to her questions are to be found in the reading lesson. These questions should follow each other in the same order in which the thoughts are expressed in the sentences of the lesson. The teacher asks her question first. All eyes are immediately at work on the first sentence in the lesson. The hands come up to indicate that the answer has

been learned by reading silently the sentence which contains it. The answer is then *told*. This enables the teacher to know that the child has read the sentence correctly. If a pupil cannot get the thought, find out what his difficulty is, and help him get it through his eye rather than by having some one tell him. New idioms should be developed and used in the introductory conversation, so that they will be familiar when they occur in the reading matter. This same sentence may then be read orally, or, if thought best, the oral reading may be postponed until after the whole lesson has been read through in this way. The latter plan is the better with older pupils.

In the answering of these questions it is preferable to have the children use the language of the book. It is not their own thought, but that of the author, which they are expressing, and the using of the author's language is what is required in oral reading.

ORAL READING.

This is the third step in the process. The child has already mastered the new words of the lesson, and the silent reading has given him the thought it contains. He is now ready to give that thought to others by reading it orally. If the words have been thoroughly taught, and the thought has been fully grasped and understood, the oral reading should be natural and fluent.

The thought should control the expression; do not attempt to teach expression by means of pauses, emphasis, and inflection. When the thought is the mind this is unnecessary. "The emphasis, inflection, and melody of most children's voices can rarely be improved. A child has already learned to express though throught oral language by means of five or six years'

continual practice; he should be trained in no new way of expressing thought in oral reading."

Suggestions for seat-work which is given in connection with the reading lessons:

1. Make sentences in letter-boxes, first from copy, then from memory, and afterwards make original sentences.

2. Copy sentences from blackboard.

3. Copy elliptical sentences, supplying omitted words.

4. Answer questions which are written on board.

5. Reproduce the thought of the lesson in original sentences. Much of this work should be done in the third and fourth grades. Use the thought gained in the reading lesson as material for the composition work in language. "A composition" in these grades should be the reproduction of some thought already developed in the child's mind. When a child is asked to write he should be *given* something to write about.

Supplemental reading should be given. In this work the children are supposed to read the lessons at sight without any previous preparation. The matter of these lessons should always be easier than that of the regular reading lessons of the grade.

Aim to make the children *sentence* readers. They should read *groups* of words, and not *lists* of words. Whether or not a child has formed this habit, can be easily detected in his oral reading. If he is a sentence reader his words will *flow* together into sentences. This habit of seeing a sentence at a time is of very great value. It eventally means power to take *rapidly* and *easily* the author's thought from the printed page.

B CLASS—FIRST GRADE.

Appleton's Chart..... ..... 25 lessons

Appleton's First Reader..... 25 lessons
Barnes' First Reader..... 25 lessons

Begin with blackboard lessons. Use script alone until ready to begin the analysis of words. In going from script to print, the child should be perfectly familiar with the script form of a word before its printed form is introduced. The transition from script to print can then be easily made.

Finish the work on the chart before taking the readers. Supplement each lesson with many sentences containing the new words, phrases or idioms. The blackboard affords opportunities for this necessary repetition. It is well to develop the new words of the lesson on the blackboard, and let their frequent use in these script sentences precede the reading of the lesson on the chart or in the book.

In blackboard lessons the children should *look* attentively while the teacher writes each sentence. By the time she is through writing it every child have read it with his eye, and his upraised hand should indicate the fact. What has been written should then be told. This telling of the thought enables the teacher to know that the child has it. It also insures its natural expression, and is a good preparatory step to oral reading proper. The latter might with profit be postponed until about the middle of the term.

The interrogative form, as well as the statement form of sentences, should be used. A good device is to write a question on the board, have the children read it silently and then answer it in their own language.

In phonics follow the chart and the Appleton reader. Analyze all "sound words" given in these in work of grade. Teach other words as sight words. Mark silent letters in all analyzed words. The sound of each letter should be developed as part of a familiar oral word. Take the word rat, for in-

stance, and have it pronounced so slowly that there is a perceptible pause between the parts or sounds of which it is composed. The mind naturally proceeds from known wholes to their analysis into parts.

Teach the names of the letters, but do not begin this work until the chart work has been completed. Teach the alphabet in regular order in connection with last ten lessons of course.

Results which should be secured: At the close of the work of this grade pupils should be able:

I. To read fluently and with good expression any lesson in work of the grade.

II. To recognize at sight, with the utmost promptness, all words in the vocabulary of this grade.

III. To spell by sound all analyzed words.

IV. To copy correctly, in sentences, all words in grade vocabulary.

V. To write from dictation short sentences composed of words in chart vocabulary, and capitalize and punctuate the some properly.

A CLASS—FIRST GRADE.

Appleton's Chart	Completed
Appleton's First Reader, Part I	Completed
Barnes' First Reader, Part I	Completed

The vocabulary to be learned in this grade includes all new words which occur in the reading lessons. These should be taught as already suggested. Develop carefully the thought side of each lesson. The child's interest in what he is reading about, and consequently his desire to know what the book says, is the strongest stimulus which can be used in the teaching of

reading. Make the things read about, really exist in the imagination of the child.

In phonics, analyze all "sound words" given on chart and in Appleton reader in work of grade.

Have the pupils read the sentences which they themselves write in word-work, language and number lessons.

Results which should be secured: Pupils should be able

I. To read well any lesson in work of grade.

II. To recognize at sight, with utmost promptness, all words in vocabulary of grade.

III. To spell by sound all analyzed words. To make out and pronounce new words made up of sounds already learned.

IV. To write from dictation short sentences composed of any words in grade vocabulary, and capitalize and punctuate the same properly.

B CLASS—SECOND GRADE.

Appleton's First Reader	Part II
Barnes' First Reader	Part II
Appleton's Second Reader	10 lessons
Barnes' Second Reader	10 lessons

Vocabulary to be learned in this grade includes all new words found in reading lessons.

Teach work in phonics as given in Appleton Reader in work of grade.

Give careful attention to the written expression of original sentences in connection with the reading lesson.

Results to be secured: Pupil should be able:

I. To read readily and with good expression any lesson in grade course.

II. To recognize at sight all words in grade vocabulary, also to make out and pronounce any new words built upon models furnished by words already learned.

III. To spell by sound all analyzed words, and to analyze new words composed of sounds already learned.

IV. To write from dictation, in short setences, any words in grade vocabulary.

V. To show that they have made some progress in the writing of original sentences.

A CLASS—SECOND GRADE.

Appleton's Second Reader... ..... Lessons XI to XXXV

Barnes' Second Reader..... ..... Lessons XI to XXXVI

It is well to read ten or twelve lessons in one reader and then ten or twelve in the other, rather than to finish the work in one before taking the other.

Vocabulary to be learned in this grade consists of all new words which occur in reading lessons. Pupils should here begin to study the derivative form of words. Teach plurals of nouns, also names formed by adding er, as hunter, teacher.

For knowledge of results to be secured: Apply what is said under this topic in B Second Course, to work of this grade.

THIRD GRADE.

B CLASS.

Appleton's Second Reader.

Barnes' Second Reader.

Begin in each book at lesson XXXVI and finish the book.

A Class.

Appleton's Third Reader..... 25 lessons
Barnes' Third Reader..... 25 lessons

Vocabulary to be learned in each grade consists of the new words which occur in the reading lessons of that grade.

Work in phonics, as indicated in the Appleton reader is to be continued in this grade. Spell words by sound and note the silent letters. This work gives children the key to the pronunciation of new words.

The spelling of sentences from dictation is continued in this grade. Careful attention to, and daily practice in the writing of original sentences in connection with the regular reading lessons, should be continued. The latter is good seat-work to follow the reading lesson.

The study of the derivative forms of words should be continued. In the B Class study the verb forms, as talk, talking, talked. In the A Class study descriptive words formed by adding ful, as careful, useful; also the change of adjectives to adverbs by adding ly, as slow, slowly.

FOURTH GRADE.

B Class.

Appleton's Third Reader—25 lessons, beginning with lesson XXVI.

Barnes' Third Reader—15 lessons, beginning with lesson XXVI.

Seven Little Sisters.

A Class.

Appleton's Third Reader—completed.

Barnes' Third Reader—completed.

Dodge's Stories of American History.

Vocabulary to be learned in each grade consists of the new words which occur in the reading lessons.

Continue the work in phonics as given in the Appleton Reader. Children should know how to consult the dictionary for the pronunciation of a word when they leave this grade.

The "Seven Little Sisters" and "Stories of American History" should prove valuable aids in supplementing the geography work of this grade. They should also furnish material for many of the language lessons.

Special attention has been given to the Reading in the Primary Grades during the past year, and although there has been a growth in the work, still the results are as yet unsatisfactory. I would recommend that more time be devoted to this subject during the coming year and have already asked for an even more generous supply of supplemental readers. We have not had enough of easy, interesting reading matter to give the pupils sufficient practice in reading. Practice gives perfection.

The subject of numbers was next taken up in the Grade meetings and for three months our attention was given to the consideration of this branch of the work. Several changes were made in the Course of Study: (1.) All the fundamental operations were introduced into the work of the first grade. (2.) Simple objective work in fractions was started in the first grade and continued through each succeeding grade. (3.) The work of the second and third grades was limited to tha

with smaller numbers than had previously been taught. (4.) Compound numbers were given a broader application in practical problems. (5.) Simple work in Percentage and Interest was introduced in the advanced classes. The effects of these changes on the work of the schools cannot be estimated until a longer time has expired since their introduction. The following manual gives the work as it is outlined for the teachers in these grades.

DETAILED COURSE IN NUMBERS.

B CLASS—FIRST GRADE.

NUMBER WORK.—Teach combinations from 1 to 6 inclusive, as given below.

Facts in Three—

2 1	3 3		
1 2	1 2	$3 \times 1 = 3$	
– –	– –	$3 : 1 = 3$	
3 3	2 1		

Facts in Four—

3 2 3	4 4 4	$2 \times 2 = 4$	$4 : 2 = 2$
1 2 3	1 2 3	$4 \times 1 = 4$	$4 : 1 = 4$
– – –	– – –	$\frac{1}{2}$ of $4 = 2$	
4 4 4	3 2 1	$\frac{1}{4}$ of $4 = 1$	

Facts in Five—

4 3 2 1	5 5 5 5		
2 2 3 4	1 2 3 4	$5 \times 1 = 5$	
– – – –	– – – –	$5 : 1 = 3$	
5 5 5 5	4 3 2 1		

Facts in Six—

5 4 3 2 1	6 6 6 6 6	$2\times3=6$	$6\div3=2$
1 2 3 4 5	1 2 3 4 5	$3\times2=6$	$6\div2=3$
– – – – –	– – – – –	$6\times1=6$	$6\div1=6$
6 6 6 6 6	5 4 3 2 1	$\frac{1}{2}$ of $6=3$	

Ideas of number come into the mind primarily through the senses, hence our work in arithmetic must have an objective basis. Develop each of these combinations by means of objects; have a great variety of objects, and study their *properties* as well as their number relations. In developing each combination, use the objects until the number relation is as clearly seen without the object as with them; then put aside the objects and give problems in which the child imagines the objects without their presence. "A pupil's real progress in number is measured by his power to think of things independent of their concrete manifestation." This concrete thinking by use of the imagination is an important step in the work.

Each fact should be so thoroughly learned by repetition in problems that it can be used instantly without the slightest effort of the mind. *Free* a pupil from each combination just as it is learned; have it so thoroughly mastered that he will know it without the slightest hesitation.

Steps in teaching a number—

I. Teach the number as a whole, with its terms and applications, as the terms double, twice, pair, etc., in connection with two as a whole, and the applications of three to the sides of a triangle, four to the feet of quadrupeds, sides of squares, petals of flowers, etc., etc. In teaching any number as a whole, look for groups of that size.

II. Lead the child through analysis to discover all the facts in the number.

III. Drill on these facts in applied problems until the child knows them automatically. Drill should be a repetition of the process and not simply a repetition of the language.

IV. Compare the new number with numbers already learned.

Suggestions for seat-work—

I. Children arrange objects in groups on desk to show number as a whole or given combination.

II. Draw objects on slates show number as whole or given combination. With beginners teachers should put this work on board and children copy.

III. Copy simple number stories in which numbers are shown by pictures of groups of objects.

IV. Use words one, two, three, four, five and six in short applied problems for reading lessons and have children copy the same.

NOTATION.—Teach figures from 1 to 6 inclusive. Figures are the names of numbers, and should be taught just as new words are taught. Associate the figures directly with the numbers which they represent. Postpone the use of figures in this grade until about the middle of the term. Number work with objects and pictures is more valuable here than figure work.

FRACTIONS.—$\frac{1}{2}$ and $\frac{1}{4}$ taught objectively.

COMPOUND NUMBERS.—Teach: Pint, quart, 2 pints=1 quart; linear inch, square inch; pieces of money—one cent, two cents, three cents, one dollar, two dollars, three dollars; postage stamps, one cent and two cent.

Measure by inches to 6 inches.

Measure by square inches to 6 square inches.

Use ideas developed in Form Study as a basis for number work. Make problems about spherical, cubical and cylindrical

objects studied in Form Work; also about different square and oblong surfaces. Measure edges and areas, count edges, corners, etc. Observe form of all objects used in number lessons.

A CLASS—FIRST GRADE.

NUMBER WORK.—Combinations from 7 to 10 inclusive, as given below.

Facts in Seven—

6	5	4	3	2	1		7	7	7	7	7	7
1	2	3	4	5	6		1	2	4	4	5	6
–	–	–	–	–	–		–	–	–	–	–	–
7	7	7	7	7	7		6	5	4	3	2	1

$7 \times 1 = 7$ $7 \div 1 = 7$

Facts in Eight—

7	6	5	4	3	2	1		8	8	8	8	8	8	8
1	2	3	4	5	6	7		1	2	3	4	5	6	7
–	–	–	–	–	–	–		–	–	–	–	–	–	–
8	8	8	8	8	8	8		7	6	5	4	3	2	1

$2 \times 4 = 8$ $8 \div 4 = 2$ $4 \times 2 = 8$ $8 \div 2 = 4$ $8 \times 1 = 8$ $8 \div 1 = 8$

$\frac{1}{2}$ of $8 = 4$ $\frac{1}{4}$ of $8 = 2$

Facts in Nine—

8	7	6	5	4	3	2	1		9	9	9	9	9	9	9	9	9
1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–
9	9	9	9	9	9	9	9		8	7	6	5	4	3	2	1	

$3 \times 3 = 9$ $9 \times 1 = 9$ $9 \div 3 = 3$ $9 \div 1 = 9$ $\frac{1}{9}$ of $9 = 3$

Facts in Ten—

9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9
–	–	–	–	–	–	–	–	–
10	10	10	10	10	10	10	10	10

$2 \times 5 = 10$ $10 \div 5 = 2$
$5 \times 2 = 10$ $10 \div 2 = 5$
$10 \times 1 = 10$ $10 \div 1 = 10$

10	10	10	10	10	10	10	10	10
1	2	3	4	5	6	7	8	9
–	–	–	–	–	–	–	–	–
9	8	7	6	5	4	3	2	1

$\frac{1}{2}$ of $10 = 5$
$\frac{1}{10}$ of $10 = 1$

Review work of preceding grade; apply all suggestions ven there to the teaching of numbers in this grade.

Require pupils to formulate problems; stimulate them to *ther* through observation materials for such problems; help em to see the number elements in nature and in all objects out them, as, two wings of a bird, four feet of a horse, three flets of a clover, five fingers of a hand, four wheels of a gon, sizes of objects at home and in the school-room, prices things, etc. The more closely the number lessons can be nnected with the child's every-day life, the more interesting d valuable will they become.

In all applied problems have children *show conditions;* in- ead of 6 birds and 2 birds are 8 birds, have the six birds dif- r in some way from the two, as 6 blackbirds and 2 bluebirds, 6 large birds and two small birds, or 6 birds in a nest and 2 ing in the air.

Give thorough drill in rapid work; children should know combinations *at sight;* just as they recognize a word instantly sight, after it has once been carefully taught.

NOTATION.—Teach figures to 10 inclusive, Roman notation 10 inclusive, and signs +, =, ×, — and ÷.

Figures, signs and arithmetical idioms or sentences should taught as other *language* work is taught, by associating em directly with the ideas and thoughts which they express. ne pupils in this grade are already familiar with the five ndamental operations in numbers to 6, and the oral language r the same; the written language for these five operations ght advantageously be taken up at the beginning of the term connection with the review of B First Work. Beginning th addition, take one idiom at a time, perform the operation th the objects (unite 4 cubes and 2 cubes); write on the board: cubes and 2 cubes are 6 cubes, and then present the new and

shorter way of writing the same: 4 cubes + 2 cubes=6 cubes. Let the pupils use this new language to write all the facts in addition which they already know. Treat the remaining four idioms in a similar way.

Read idioms as here given:

4 + 2=6	read 4 and 2 are 6.
2 × 3=6	2 threes are 6.
6—3=3	6 minus 3 are 3.
8 ÷ 4=2	There are 2 fours in 8.
$\frac{1}{2}$ of 6=3	$\frac{1}{2}$ of 6 is 3.

Give special lessons in learning to make figures and signs: have them made distinctly and all work arranged neatly.

FRACTIONS.—Teach $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{10}$ objectively. After developing these ideas by dividing objects, illustrated slate work, such as the following suggests, may be given:

Draw 6 horizontal 3-inch lines and divide each one into halves.

Draw 4 circles and divide each one into thirds.

Show $\frac{1}{2}$ of a 2-inch square, $\frac{1}{2}$ of a 4-inch square.

Draw 6 chairs and show $\frac{1}{2}$ of them.

Draw 10 pennies and show $\frac{1}{10}$ of them.

COMPOUND NUMBERS.—Teach linear foot and square foot (as wholes) and cubic inch. Have children draw square foot on buard, cut it out of paper, make cubic inch in clay, etc.

Teach 10 cents=1 dime, 10 dimes=1 dollar, 5 nickels=1 quarter, 4 quarters=1 dollar, 2 half-dollars=1 dollar; also. 7 days=1 week, 4 weeks=1 month, and 4 quarts=1 gallon.

Measure by inches to 10 inches, by feet to 10 feet, by square inches to 10 square inches. Measure all squares and oblongs having areas not exceeding 10 square inches. Show by drawing fractional parts ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{10}$) of such lengths and areas. Connect closely the Form Work and the Number Work.

Buying, selling and making change furnish good material for problems.

B CLASS—SECOND GRADE.

NUMBER WORK.—Teach all combinations from 11 to 18 inclusive. Review work of previous classes.

Facts of Twelve—

11	10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10	11
12	12	12	12	12	12	12	12	12	12	12

12	12	12	12	12	12	12	12	12	12	12
1	2	3	4	5	6	7	8	9	10	11
11	10	9	8	7	6	5	4	3	2	1

$2 \times 6 = 12$	$12 \div 6 = 2$	$\frac{1}{2}$ of $12 = 6$
$3 \times 4 = 12$	$12 \div 4 = 3$	$\frac{1}{3}$ of $12 = 4$
$4 \times 3 = 12$	$12 \div 3 = 4$	$\frac{1}{4}$ of $12 = 3$
$6 \times 2 = 12$	$12 \div 2 = 6$	$\frac{1}{6}$ of $12 = 2$
$12 \div 1 = 12$	$12 \div 1 = 12$	

Take all combinations in every number in course as is here done with 12; follow suggestions given in work of preceding grades in the teaching of each number.

Free the children from the work of the grade; no further calculations should be necessary. Every combination should be recognized at sight, after having been taught.

In the four or five problems given daily for seat-work in this grade there should be at least one to be pictured and also one to be written out in full, the former to fix the new combination and the later to help with the language of arithmetic.

Give exercise in the reading of problems; connect number and reading.

NOTATION.—Teach figures and Roman notation to 18 inclusive.

In connection with the teaching of eleven, develop the idea of tens and units. Show with splints that eleven, is composed of one bundle of tens and one unit. Notice the writing of tens and units. Continue this work with the numbers which follow.

FRACTIONS.—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{8}$, $\frac{1}{10}$, taught objectively. Follow suggestions given in work of preceding grade.

COMPOUND NUMBERS.—Teach peck, yard and square yard, also cubic inch.

12 in.=1 ft.
3 ft.=1 yd.
12 things=1 dozen.
12 months=1 year.
9 sq. ft.=1 sq. yard.

Measure

By inches to 16 inches.
By feet to 16 feet.
By yards to 16 yards.
By square inches to 16 square inches.
By square feet to 16 square feet.

Measure 1 square yard, use blackboard and other large surfaces where necessary. Make drawing of 1 sq. yd. divided into 9 sq. ft., and let it remain on board throughout term.

Connect measuring of squares and oblongs with combinations in number wherever possible; also show fractional parts of these areas.

Make use of all First Grade work in compound numbers in applied problems.

A CLASS—SECOND GRADE.

NUMBER WORK.—Teach numbers from 18 to 30, giving ecial attention to multiples.

NOTATION.—Read and write numbers to 100, Roman tation to 35.

FRACTIONS.—Teach $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$ and $\frac{1}{10}$ objectively. se illustrated slate-work as already suggested.

COMPOUND NUMBERS.—Teach bushel, ounce, pound and bic inch; also, 16 oz.=1 lb., and 4 pks.=1 bushel.

Areas of squares and oblongs and fractional parts of the me, as given in preceding grade, continued. Areas not to ceed 20 sq. in., sq. ft. or sq. yds. Measure perimeters also these square and oblong surfaces.

Use all compound numbers of previous grades in applied oblems.

PROCESSES.—Addition of any two numbers whose sum is ss than 100. Give thorough drill in rapid work in these mbinations. Aim to secure accuracy and rapidity.

Teach subtraction, with reduction, minuends less than 100.

Teach multiplication, products less than 100 and multiplier 2.

Teach short division with reduction, dividend not to exed 100 and divisor 2.

Develop addition, subtraction, multiplication and division *ith reduction* by use of splints. Let the numbers be shown tens and ones, the tens being each in a bundle by itself.

B CLASS—THIRD GRADE.

NUMBER WORK.—Teach numbers from 30 to 60 inusive. Give special attention to multiples. In all work

with multiples teach division and partition as well as multiplication, as $7 \times 8 = 56$, $56 \div 8 = 7$, $\frac{1}{7}$ of $56 = 8$.

Review multiples from beginning.

NOTATION.—Read and write numbers to 1,000, Roman notation to 70.

FRACTIONS.—Continue work of preceding grades. Teach $\frac{1}{12}$, also reduction of mixed numbers to fractions. Use no fraction whose *denomination* is larger than 12. Teach by means of objects and drawings.

COMPOUND NUMBERS.—Teach 60 minutes=1 hour, 24 hours=1 day, 365 days=1 year; also the number of days in each month of the year.

Teach how to write dollars and cents, and use dollars and cents together in applied problems.

Teach linear rod, draw one on board (divide into $16\frac{1}{2}$ feet), and keep it there during term. Measure room, halls, school-grounds, etc.; use rod in problems, find distances around square and oblong lots, etc.

Use all compound numbers taught in preceding grades in problems.

PROCESSES.—Teach addition of two or three numbers larger than 100 whose sum is less than 1,000.

Column addition of three figures.

Multiplication of numbers of one period, using 2, 3, 4, 5 and 6 as multipliers.

Subtraction with reduction, using numbers of one period only.

Short division with reduction, using 2, 3, 4, 5 and 6 as divisors.

Give thorough drill. Children should add, subtract, multiply and divide numbers of one period with accuracy and rapidity.

Most of the problems given for seat-work should be applied problems. Have children make statements.

Aim to secure accuracy and rapidity in both thought and mechanical work. Have all work neatly and carefully done.

A CLASS—THIRD GRADE.

NUMBER WORK.—Multiples from 60 to 100 inclusive. Review and thoroughly master all multiples to 100. Each fact should be carefully developed and applied, so that multiple work will be thought work instead of memory work. Drill by repeating the process. Daily oral work in applied problems is recommended.

NOTATION.—Read and write numbers of two periods. Roman notation through 100.

FRACTIONS.—Continue work of preceding grades. Teach reduction of improper fractions to whole or mixed numbers, using no fraction whose denominator is larger than 12.

Teach objectively addition, subtraction, multiplication and division of halves, thirds and fourths.

Use illustrated slate-work as previously suggested.

COMPOUND NUMBERS.—Teach dollars and cents and use them together in applied problems.

Teach cubic foot (as a whole). Make cubical box one foot in dimensions and keep it in sight during term. Make problems about things which are measured by the cubic feet.

Teach linear mile. Locate some familiar object which is one mile from school-building and have each child know that distance as one mile. Connect this with geography work, and use many true applied problems about distances in Detroit, Wayne County and Michigan.

Use compound numbers taught in preceding grades in applied problems.

PERCENTAGE.—Teach 100%, 50% and 10% objectively. Use them in applied problems and have children understand and use both fractional and decimal forms for these percents. Percentage is simply a new language for something which the child already knows.

PROCESSES.—Addition of two or more numbers of two periods each.

Column addition of four figures; daily drill in rapid work.

Subtraction with reduction, using numbers of two periods.

Multiplication, multiplier containing two figures.

Short division completed. Use dividends in which reminders occur.

Make statements for problems.

Insist in neatness and accuracy in all written work.

In applied work use numerators larger than 1 in finding fractional parts of numbers, as, ⅓ of $1,250, ⅞ of 9,280 sheep.

Give exercise in the reading of problems. Train pupils to get the thought in a problem before attempting its solution.

B CLASS—FOURTH GRADE.

NUMBER WORK.—Review all work in multiples and complete to 144. Daily oral work in applied problems is recommended. Aim for rapidity in their solution.

NOTATION.—Read and write numbers through units of millions.

FRACTIONS.—Develop the terms numerator and denominator.

Teach objectively addition, subtraction, multiplication and division of halves, thirds and fourths, and give written figure work for the same. Lead children to discover that operations with fractions are same as with whole numbers. Associate written language of fractions directly with the thing that it represents.

COMPOUND NUMBERS.—Complete liquid measures. Teach cubic yard (as a whole), and make problems about things which are measured by the cubic yard.

Teach square rod (as a whole). Measure one off on floor or wall. Use square rod in applied problems. Show by drawings the number of square rods in rectangular fields whose areas are less than 40 sq. rods.

Use compound numbers taught in preceding grades in applied problems.

PERCENTAGE.—Teach 20%, 25% and 75% objectively. Use them together with rates taught in preceding grade in applied problems. Teach use of both fractional and decimal forms for these per cents.

PROCESSES.—Continue addition and subtraction.

Teach multiplication, multiplier containing three figures and multiplicand containing not more than three figures.

Teach long division, using divisors which do not exceed 30.

Make statements for problems.

Secure accuracy, neatness and good arrangement in all written work.

A CLASS—FOURTH GRADE.

NUMBER WORK.—Teach reduction of compound numbers to a higher or a lower denomination, and use all com-

pound numbers already taught in lower grades in applied problems involving *one* reduction.

NOTATION.—Read and write numbers of three periods.

FRACTIONS.—Teach addition, subtraction, multiplication and division of all fractions through twelfths, and teach written figure work for the same. Use objects and illustrations.

COMPOUND NUMBERS.—Advoirdupois weight completed. Review all work of preceding grades.

PERCENTAGE.—Teach objectively $33\frac{1}{3}\%$, $16\frac{2}{3}\%$ and $12\frac{1}{2}\%$, Use them, together with rates previously taught, applied in problems.

INTEREST.—Teach simple interest, 6%, time expressed in years.

PROCESSES.—Addition, subtraction, multiplication continued.

Long division continued, divisors containing not more than three figures.

Use statements.

Teach simple form of bill.

Geography was the next subject taken up at the Grade Meetings, and the following detailed courses give in a condensed form the substance of the discussions. The changes in the course are: (1.) To broaden out the work in Elementary Geography and introduce it into the first and second grades as material for language work. (2.) To give in the fourth grade more attention to the structure, climate and life of North America and not so much attention to some of the less important facts in its political geography.

ELEMENTARY GEOGRAPHY.

GEOGRAPHY is divided into two parts—elementary and foreign.

Elementary geography includes all that part of the world which can be studied through observation. Its study precedes that of foreign geography, because it furnishes the material for the study of the latter.

Foreign geography includes that part of the world which lies beyond our environment. It can be studied only through the imagination.

The purpose of this work in elementary geography is to develop in the child through the intelligent and systematic observation of his environment all the elementary ideas essential to a comprehension of foreign geography.

In this work the teacher should aim to do two things.

First. Cultivate observation—open the child's eyes to what is taking place in the world about him. "Every little nook and corner is but a reflection of the whole of Nature."

Second. Cultivate expression—lead the child to the complete expression of his thought regarding the world about him. This work is intended for language as well as for geography.

B CLASS—FIRST GRADE.

1. FORM.

Lead children to observe form in objects about them, find spherical and cylindrical objects in nature; fruits, twigs, trunks of trees, trunks and limbs of animals, etc.

2. COLOR.

Observe color in natural objects—grass, leaves, flowers, fruit, animals, clouds, etc.

3. SIZE.

The measuring in the number work of this grade should lead the child directly to the observation of size in objects about him.

4. PLACE.

Teach right, left, up, down, front, back, here, there, east and west.

5. WEATHER AND SEASONS.

Day and night, winter and summer, cold days and warm days, cloudy days and clear days, wet weather, sun rises in east and sets in west, moon and stars.

6. PLANTS.

Observe the falling of the leaves in autumn and the opening of buds in the spring.

Parts of a plant—root, stem, leaves, flowers and fruits. Name these parts and notice their position, form, color, etc.

7. ANIMALS.

Covering—fur, feathers, scales, etc.

Parts,—name, number of each, use, etc.

Make special study of a cat and a bird, compare them.

8. MINERALS.

Coal, where and how obtained, use?

9. PEOPLE.

Appearance—color of hair, eyes and skin.

Tell children story of Agoonack (Seven Little Sisters), or some other child who lives in polar regions. Compare her way of living with theirs. Use pictures and drawings on black board; make it vivid as possible to children. Have pupils learn to tell the story.

10. MODES OF LIFE.

Kinds of buildings—schools, churches, dwelling houses, stores, etc.

Ways of traveling—carriages, street cars, railroad cars, etc.

Ways of talking to people—speaking, writing letters writing books, etc.

Occupation—Let children tell what their fathers and different people whom they know are occupied in doing.

A CLASS—FIRST GRADE.

1. FORM.

Surfaces are even and uneven, level and slanting; observe and describe the surface of the school yard, streets, etc.

In connection with study of hemisphere observe sky and horizon.

In connection with study of triangular prism develop idea of hill.

In connection with study of prisms observe forms of buildings, rooms, halls, etc.

2. COLOR.

Continue observation of color in natural objects, learn names of common hues. Match and compare colors. Notice changes of color in grasses, leaves, fruits, etc.

3. SIZE.

Observe size in objects, connect this with the work of measuring in number work of grade.

4. PLACE.

Teach east, west, north and south.

Observe sun's daily path across heavens, teach morning, noon and evening.

Locate objects in school room.

5. WEATHER AND SEASONS.

Windy days and calm days.

Appearance of clouds, what makes them move?

Ice and snow, what makes them?

Amount of heat during different parts of the day.

Lead children to notice weather each day and tell what they can about it.

Learn names of seasons and observe changes from one season to another.

6. PLANTS.

Parts—root, stem, leaves, flowers and fruit.

Plant seeds in spring and watch their growth, discover that they need heat, light and moisture.

Describe different fruits in autumn, and notice when they ripen.

Observe falling of leaves in autumn, and opening of buds in spring.

Study, model and draw stems and leaves.

7. ANIMALS.

Covering, parts, food and homes.

Special study of horse, fish, fly and robin.

Have each child observe animals for himself, and tell what he has found out about them.

Migration of birds—notice their disappearance in fall and return in spring.

8. MINERALS.

Iron—where and how obtained, use.

Building stones—where and how obtained.

9. PEOPLE.

Tell children story of Gemila (Seven Little Sisters), or of any other child who lives in torrid climate. Compare her way of living with theirs. Review story of Agoonack. Have children tell these stories.

Read about and tell about people of other lands, show pictures of their homes, etc. Home life becomes very interesting when contrasted with life in other countries.

10. MODES OF LIFE.

Ways of traveling (*continued*).

Ways of communication—telephone, telegraph, newspapers, etc.

Choose one article manufactured in Detroit, and learn how it is made.

Lead children to observe what different people about them are doing.

11. GOVERNMENT.

Develop the idea of government by calling attention to that of the home and school. Show the necessity for, and some of the essentials to good government.

B CLASS—SECOND GRADE.

1. FORM.

In connection with triangular prisms develop ideas of hill and valley. This solid is the type form for both these forms of land. The slanting sides or surfaces of the hill or valley are called slopes.

In connection with the study of ovoid and ellipsoid observe these forms in fruits, eggs, bodies of birds and other natural objects.

2. COLOR.

Continue observation of color in natural objects.

3. SIZE.

Measure length, breadth, and hight of school room, estimate and measure altitude of different objects in room. Continue to observe size in natural objects.

Daily motion of sun, observe shadows at different parts of day.

Observe different amounts of heat in different parts of day --in which direction from us is the sun when we get the most heat?

Observe lengths of days in different seasons.

Evaporation--what becomes of water after a rain, of water which leaves clothes in process of drying, of water in tea-kettle when it boils dry.

Lead children to know of the presence of moisture in the atmosphere. Make simple experiments.

Notice direction of winds--what can winds do? (Air as a *substance* in motion has pushing force.)

5. VEGETATION.

Kinds of soil--sand, gravel, clay and loam--uses of each.

Gardens--when and how made. Vegetables raised in gardens in and about Detroit.

Common trees found in vicinity.

6. ANIMALS.

Uses--food, clothing, beasts of burden, etc.

Animals likely to be found on a Wayne county farm--names, how and why raised.

Wild animals to be found in this vicinity.

7. MINERALS.

Salt and petroleum--where and how obtained.

8. PEOPLE.

Read and talk about Chinese, compare their manner of living with ours, observe and describe objects brought from China.

9. MODES OF LIFE.

Stores--why needed--work done by merchants.

Banks--work done in them.

Post-office—work done in it.

Work done by boats and railroad trains which come to and from Detroit.

B CLASS—THIRD GRADE.

1. Structure.

Relief of school district, study by actual observation.

1. Land surface is made up of slopes; these may be long or short, gradual or abrupt. Find one of each kind in vicinity, observe it closely, describe and model in sand from memory.
2. Slopes meeting at their upper edge form water partings, find water partings in vicinity, observe, describe, model. This idea of a water parting is very important in its relation to an understanding of drainage.
3. Slopes also meet at their lower edges (valleys.) Find such a meeting in vicinity and observe what happens at this place when it rains. Why a stream of water forms here.
4. Develop idea of brook-basin, find stream in vicinity (if no permanent ones, then watch one made during rain,) and observe.
   - *a.* Basin—from how far is the water drained into this brook?
   - *b.* Direction—the water will flow the way the land slopes.
   - *c.* Velocity of water is determined by slope.
   - *d.* Size of brook is determined by size of basin and amount of rainfall.

e. Banks and mouth.

f. Mud in brook—where it comes from—what becomes of it.

g. Uses of a brook.

2. PLACE.

Semi-cardinal points.

Draw map of school room floor to a scale, also map of school yard.

3. CLIMATE.

a. Moisture.

1. Evaporation—where moisture in air comes from.
2. Productions—clouds, fog, mist, rain, hail, snow, dew and frost.

b. Heat. Observe daily temperature—read thermometer.

Position of sun:

1. During different parts of the day.
2. During different parts of the year.

4. VEGETATION.

Soil—fertile and barren.

Uses of plants—food, clothing, lumber, etc.

Observe and learn names of five fruit trees found in vicinity; also two ornamental ones.

5. ANIMALS.

Some which live on land, in water, in warm countries, in cold countries, in forests, on grassy plains.

Read about camel and notice particularly how it is fitted to live on a desert.

Special study of bears—brown and polar.

6. MINERALS.

Chalk and graphite, where and how obtained.

7. PEOPLE.

Elementary lessons on races represented in community.

8. MODES OF LIFE.

Occupations—farming, mining, lumbering, manufacturing, commerce.

Excite ideas of a city, a town, a state.

9. GOVERNMENT.

Lead children to find out that which they can comprehend about the city government.

A CLASS—THIRD GRADE.

1. STRUCTURE.

Forms of land and water. Through observation, aided by imagination, develop clear concepts of island, continent, peninsula, isthmus, cape, lake, ocean, sea, gulf, bay, strait, harbor, plain, hill, valley, mountain, (peak, chain, system,) river basin, spring, creek, river, river system.

Use oral description by teacher, written descriptions, maps, models, pictures.

2. DETROIT.

Draw map of city, showing river front, Campus Martius, City Hall, Belle Isle and Grand Circus Parks, Fort St., Gratiot Ave., Woodward Ave., Michigan Ave., Grand River Ave., and child's own home and school.

Observe distance and direction of these places from his home.

3. WAYNE COUNTY.

Draw map, showing townships, to some scale.

Learn names of townships bordering on Detroit.

4. STATE OF MICHIGAN.

a. Parts—Upper and lower peninsulas and many islands.

b. Length (280 miles) and breadth (200 miles) of Lower Peninsula, use these distances in problems.

c. Boundaries.

d. Surface—Upper Peninsula broken and rugged. mountainous in western part.

Lower Peninsula—a plain rising into hills in central and western parts.

e. Drainage—observe slopes and general direction of rivers.

Rivers—Detroit, St. Clair and Grand.

Lakes—Michigan, Huron. Erie, Superior, St. Clair.

f. Coastline—Green Bay, Grand Traverse, Saginaw, Mackinaw Straits and St. Clair canal.

g. Climate—find how climate in different parts of state compares with that of Detroit.

h. Vegetation—locate fertile parts of state and tell their principal productions.

i. Tell what people are doing in different parts of state. Agriculture, lumbering and mining are leading industries.

j. Cities—Detroit, Lansing. Grand Rapids, Bay City, Saginaw. Jackson. Ann Arbor and Marquette.

k. Railroads—Michigan Central; Detroit and Grand Haven; Detroit, Lansing & Northern; Grand Trunk; Detroit, Bay City & Alpena; Wabash; Flint & Pere Marquette.

Draw map in connection with study of each topic and locate things learned about.

FOREIGN GEOGRAPHY.

B CLASS—FOURTH GRADE.

EARTH AS A WHOLE.

1. FORM—Proofs:
   - *a.* Ship at sea.
   - *b.* Circumnavigation.
   - *c.* Shadow of moon.
2. DIMENSIONS:
   - *a.* Diameter.
   - *b.* Circumference.

Use these numbers in applied problems to help to a comprehension of them.

3. MEASUREMENT:
   - *a.* Poles.
   - *b.* Equator.
   - *c.* Parallels.
   - *d.* Meridians.
   - *e.* Latitude and longitude.
   - *f.* Circular measure.
     1. How marked on maps.
     2. Use.

Model clay sphere, mark poles, then draw equator, parallels and meridians, develop idea of axis in this connection.

4. DAILY MOTION:
   - *a.* Time of rotation.
   - *b.* Causes of day and night.

5. YEARLY MOTION:
   - *a.* Orbit.
   - *b.* Inclination of axis.
   - *c.* Time of revolution.

6. DISTRIBUTION OF HEAT:
   - *a.* Sun's rays—vertical and slanting.
   - *b.* Zones.
     1. Names.
     2. Boundaries.
     3. Location.

Clay model sphere and mark climatic circles—equator, tropic and polar circles.

7. Winds:
   - *a.* Earth enveloped in atmosphere.
   - *b.* Equal distribution of heat causes unequal heating of atmosphere.
   - *c.* Unequal heating of atmosphere starts circulation. Cold air has more "pushing force" than warm air and consequently displaces it.
   - *d.* Hot air in torrid zone is being constantly pushed upward by colder air flowing in from regions beyond tropics.
   - *e.* General circulation—trade winds, return trades and polar winds. Make map showing these five wind zones.

"Child and Nature," pp. 169–174.

SEASONS—causes.
   - *a.* Revolution of earth around sun.
   - *b.* Inclination of axis.

9. SURFACE OF THE EARTH:
   - *a.* Land and water.
     1. Proportion.

2. Distribution.

b. Continents.

1. Names.
2. Relative positions.

c. Oceans.

1. Names.
2. Relative positions.

d. Compare.

1. Land and water hemispheres.
2. Eastern and western hemispheres.
3. Northern and southern hemispheres.

For help in teaching Earth as a Whole, consult "Child d Nature," pp. 94–105; also "How to Study Geography,"). 285–312.

NORTH AMERICA.

1. Location and Boundaries.
2. Structure.

a. North America, a triangular mass of rock 3,000 miles wide, and 5,700 miles long.

b. Continental water parting extending from Pt. Barrow to Panama, divides continent into two great slopes, the Atlantic or long slope, and the Pacific or short slope.

Compare these slopes in length, width and area.

Model continent, showing these two slopes.

c. Depression extending from mouth of Mississippi to mouth of McKenzie divides the continent into two great land masses called primary and secondary highlands.

d. Primary Highland:

1. Occupies western part of continent.
2. Extends from Arctic to Isthmus.
3. Is a vast plateau surmounted by Rocky and Sierra Nevada mountain systems.
4. Broadest near central part.
5. Elevation increases from 800 feet near Arctic coast to 8,000 feet in Mexican Plateau, then decreases towards Isthmus.

Locate and describe Rocky and Sierra Nevada Systems, also Coast Range.

Model continent, showing features of Primary Highlands. Describe—orally and in writing.

e. Secondary Highland:

1. Extends from Labrador to Gulf of Mexico.
2. Consists of Labrador and Appalachian Plateaus.
3. Average elevation about 2,000 feet.

Locate and describe Appalachian Mountains and Atlantic Coast Plain. Compare Labrador Plateau with Appalachian Plateau, in shape, size and location.

Model, continent, showing features of Secondary Highland. Compare the Primary and Secondary Highlands in location, size, elevation, mountain systems.

Draw from memory, structure map showing features of Primary and Secondary Highlands.

f. Great Central Plain.

The Primary and Secondary Highlands are each composed of two great slopes. The eastern slope of the Pacific Highland, and the western slope of the Atlantic Highland form the great central region of North America.

1. It extends from Arctic to Gulf or Mexico,

2. Is crossed near centre by Hight of Land, which is from 1,000 feet to 2,000 feet high.

3. North of Hight of Land, Great Central Plain slopes toward Arctic ocean, south of this elevation, it slopes toward Gulf of Mexico.

Model continent, showing features of Great Central Plain.

3. DRAINAGE:

North America is naturally divided into great river basins. Locate the water partings which separate these basins, and study the following basins with reference to the slopes of which they are composed:

a. Mississippi Basin.
b. McKenzie Basin.
c. St. Lawrence Basin.
d. Hudson Bay Basin.
e. Yukon Basin.
f. Columbia Basin.
g. Colorado Basin.
h. Basin of Atlantic System.

Describe each river as its basin is studied,

Special study of St. Lawrence Basin. Map from memory, showing location of rivers.

4. OUTLINE.

Coasts—Arctic, Atlantic and Pacific.

a. Position and general direction.
b. Length.
c. Kind—building, wearing or frozen.
d. Projections — Alaska, Florida, Yucatan, and Lower California.

e. Indentations—Hudson Bay, Gulf of St. Lawrence, Gulf of Mexico, Behring Sea and California.

f. Islands—Greenland, Iceland and West Indies.

This study of outline should be taken up in connection with the study of structure, and the two subjects taught together.

Map from memory showing features of outline.

Reading for teachers: "How to Study Geography," pp. 26–34, also pp. 185–210; "Child and Nature," Chap. XI. Reading for pupils: "Our World Reader," pp. 1–35.

A CLASS—FOURTH GRADE.

Review B Fourth work on North America, and in connection with this review teach the following about the continent.

1. STRUCTURE:

Mexican Plateau, Gulf Slope, and some of the principal ranges and peaks in the great mountain system, as Sierra Madre, Alleghany, St. Elias, etc.

2. DRAINAGE.

Special study of Mississippi Basin.

a. Location.

b. Size.

c. Slopes.

d. River Systems—Mississippi, Missouri, Red, Ohio, Arkansas.

Atlantic System, including Connecticut, Hudson, Delaware, Susquehanna, Potomac and James.

Rio Grande.

Lakes—Great Salt Lake, St. Clair, Champlain, and lakes of McKenzie system,

3. OUTLINE:
   - *a.* Projections—Nova Scotia and Cape Cod.
   - *b.* Indentations—San Francisco, New York, Massachusetts, Delaware and Chesapeake Bays.
   - *c.* Sounds and Straits—Hudson, Long Island, Behring, Puget.
   - *d.* Islands—Long, Sitka.

4. CLIMATE:
   - *a.* Heat.
     1. Location of continent in three zones. Map from memory showing continent crossed by climatic circles.
     2. Heat influenced by elevation. Locate portions of continent which are colder than average temperature of zones which contain them. Compare climates of Vera Cruz and Mexico City.
     3. Heat influenced by proximity to oceans. Compare climates of San Francisco and St. Louis.
   - *b.* Moisture.
     1. General direction of winds which bring rain to North America.
     2. Location of rainless districts.
     3. General distribution of rain over continent. Maps showing this.

"How to Study Geography," pp. 315–320.

"Child and Nature," p. 175.

5. DISTRIBUTION OF VEGETATION:
   - *a.* Soil. Map showing fertile and barren regions.
   - *b.* Forest lands and grassy plains. May locating these regions

c. Principal vegetable products of each zone. Draw map, show zones; write in each the names of its principal vegetable productions.

6. DISTRIBUTION OF ANIMALS:

a. Animals peculiar to forest regions.

b. Animals peculiar to grassy plains.

c. Animals found in Arctic regions.

Map showing where principal animals of North America are found.

7. DISTRIBUTION OF MINERALS:

Locate mining regions and learn principal products. Make maps showing these regions.

For vegetable, mineral and animal productions consult Appletons' Geography, pp. 34 and 35.

8. PEOPLE:

a. Races found in North America.

b. Special study of Caucasian.

9. POLITICAL DIVISIONS:

a. Greenland and Ireland.

b. United States and Alaska.

c. Canada and Newfoundland.

d. Mexico.

e. Central America.

f. West Indies.

Map from memory showing political divisions of continent.

Read carefully what is given in Appleton's Geography about each division.

UNITED STATES.

1. LOCATION AND BOUNDARIES.

2. EXTENT:

Length, width, area.

3. ADVANTAGES:
    a. Geographical position.
    b. Structure.
    c. River systems.
    d. Climate and Productions,
4. POPULATION.
5. EDUCATION—Public schools.
6. RELIGION—No established schools.
7. GOVERNMENT—Federal Republic.
8. HISTORY—As read in "Dodge's Stories of American History."

A GROUP OF STATES.

1. Name, and why so called.
2. Location.
3. States included.
4. Surface.
5. Rivers and Lakes.
6. Soil.
7. Climate.
8. Occupations.
9. Productions.
    a. Vegetable.
    b. Mineral.
    c. Manufactured.
10. Exports.
11. Cities.

A group of states should always be thought of in its relations to the whole continent; these relations of the part to the whole are vital.

Read what is given in Appletons' Geography about each state and locate each place mentioned.

Cities—New York, Chicago, Philadelphia, Brooklyn, St. Louis, Boston, Baltimore, San Francisco, Cincinnati. Cleveland, Buffalo, New Orleans, Pittsburg, Washington, Detroit, Minneapolis, Lowell.

Reading for pupils: "Scribners' Geographical Reader." pp. 1–89. "Our World Reader," pp. 205–254.

GOVERNMENT.

The general discipline in the schools is good, the children are taught to be prompt and regular in their habits, careful and accurate in their work, polite and kind in their deportment toward each other.

The best criterion of a teacher's work is the conduct of her pupils. The most valuable service which a teacher can render is to make honest, energetic, intelligent and trustworthy boys and girls. "The ability to leave a lasting mark on the mind and character of a pupil is the unmistakable sign of a real teacher."

In conclusion, I desire to express my gratitude for the confidence, kind advice and valuable help which you have given me in my work during the year.

MATHILDE E. COFFIN.

July I, 1892.

DRAWING.

To W. E. Robinson, Superintendent City Schools:

The substitution of Prang's Complete Course in Form Study and Drawing for the old series of books at the beginning of the year, has been attended by many good results.

Since the study of Form and Drawing includes all of the essential points in the philosophy and methods of Troebel, and uses these as the foundation principles in the instruction of the child, its true value as a factor in education can no longer be questioned.

Forming the connecting link between the kindergarten and the manual training school as it does, adapting the methods used to the intellectual calibre of the pupil, we shall at once find that power to see, power to think, power to do, constitutes the whole basis of Form Study in our schools.

To this end perfect type-forms should be placed before the youngest pupils that they may be able through their own investigations by sight, by handling, and by modelling, to gain definite ideas of form and of the elementary properties of form. The expression must be of the simplest possible character, as genuine and free as the child can make it. That method which places the indefinite before the definite, and calls for the expression of form in which accuracy is overlooked, when one may disregard the truth in every line without in the least affecting the good appearance of the exercise has no educational value and no claims for consideration in the school course.

The use of type forms, tablet laying and stick laying, clay modelling, paper cutting, and folding and drawing are the main features of the first two years' work.

Nothing is taught as an isolated fact and those teachers who have shown best results in this department have made the work a sequential whole from the first to the last lesson of the course; have so related it to language, number and geography that it has become a mediator between subjects ordinarily kept apart, "Form Study is concrete mathematics,"

How vastly more valuable is the knowledge the child gets of the square and circle through making a cube and a cylinder, than by any geometric definition that can be given him.

Every solid used in form has its special number quantity, while splints, tablets and form blocks are frequently used for counting and adding. In language work the child is quite at ease in talking about the type forms, as he has something in his own experience to talk about; and from the story of the pyramid and triangular prism, as he advances; he takes up the study of geography awake to the preceptions of mountain peak and table land. He is not misled by appearances though conditions modify them.

To him nothing is isolated for he finds the universal type everywhere. "Nature, history, geometry all supply him with store houses for imagination."

Recognizing the importance of a terms' record in drawing, and form expression on a larger scale, after a careful study of the twelve type solids the first drawing book is introduced into the third year of the course. Through this year, as indeed through all the grades where books are used much supplemental work is required.

The process of drawing in books gives individual records and makes ignorance visible; if a pupil's work is incorrect the endeavor should be rather to change the mental process than the drawing on the page. I cannot emphasize too strongly what I have always maintained, that whatever may be the character of the exercise made by the pupils, the main results of any value arising from teaching drawing are to be found in the minds of the pupils and not in the drawings themselves.

To teach children to think, to think rightly; to develop ability to analyze and compare, to distinguish the difference between the right and wrong in form, between that which is

beautiful and that which is not beautiful, and to incline them to choose the right, the beautiful and true by their own mental action has always been our one great endeavor. Whether the means by which we give the knowledge of facts, or excite the emotions to produce the mental act of choice be arithmetic or drawing, the result looked for must be the same; and the processes through which it is done are only the means never the end, and relatively only, therefore of little importance. We wish, therefore, to teach our pupils how to draw, and not merely to make drawings; remembering that the most valuable result to be obtained by the pupils is a mental act and not a picture of the truth in the book, but the truth itself in the mind of the child.

An incorrect drawing is not always an accident; it is generally an uncomfortable though accurate mirror of one's thoughts, and fixes the stage of mental development and civilization, we have arrived at. The taste of the child, the untutored adult, however, and the savage are on par. The adult, however, acquires information through mental discipline, while the child receives it with pleasurable emotions and pure delight when properly administered; and this fact emphasizes the importance of beginning form study at an early age.

The work in books continues through the grammar grades under the three heads of construction; representation and decoration, with supplementary work in drawing leaves and flowers from nature, fruit and vegetable drawing, and elementtary design. The mechanical divisions of the work is taken up in the seventh and eighth grades and finds expression in the making of working drawings.

While correct observation is fundamental in all work, our aim is to call into action in timely relation all the faculties of

the mind. In taking up decorative work, therefore, it is not intended that all who design shall become designers. The exercise is a discipline to common faculties and not to special abilities. Pupils are hereby taught to exercise their creative and original faculties, to arrange and express their thoughts in the language of form, to secure a defined result, just as they are instructed in the use of English by the exercise of writing original compositions. It is to create a habit of method and order, and love of accuracy in their work that pupils are taught to design; to substitute the best for the poorest under careful guidance and it is found to be one of the most powerful agents in calling into exercise the imagination.

The methodical arrangements of subjects in books, together with the use of manuals makes it very possible for teachers to give more thorough instruction in this branch. It was at one time thought that the printed figures on the page should be rejected altogether. With our present system the figures suggest the form to be studied under different conditions, but in no way indicate the drawings to be made, and are never used as copies, except in case of Historic ornament. In crowded rooms, of fifty or sixty pupils, where the instruction must be largely class instruction and not individual as in private studios and Art Museums, and the class teacher herself only a beginner, to drop out the books with their accompanying manuals, would be hazardous to the interests of the pupils. The experiment has been tried in several schools in the East with disastrous results, followed by a return to books.

The Normal Training School is an important factor in the education of our pupils. All we put into it comes back with interest through the grades. During the past year I have been able to give more time to this class, believing it to be most valuable and profitable time spent in the interest of the

schools. We cannot look for a broad understanding of any subject until the teacher is educated therein. There can be no appreciation of the beautiful and true in form common to the people until the teachers of their children are educated to a perception of it.

I had hoped before the close of the present year to see a complete line of color work established in our schools; such as has been introduced into the Normal Training Class. We shall look forward to the possibilities of another year with great courage, believing a carefully prepared color scheme to be the one feature necessary to complete our present course.

I must still plead for color instruction in our schools as one means of bringing nature nearer to the hearts of our children and of adding secret refreshment and joy to simple uneventful lives; of opening eyes to the beauties beyond the environments of brick walls and stone pavements. Who can measure the value of such an inheritance?

In primary grades we are, also in need of individual models for pupils use to carry out successfully the plan of work.

Properly equipped with type-forms for form study and with material for color work, with the continued co-operation of earnest and faithful teachers, we hope to be able to show in the near future results that shall be worthy of all that this important branch signifies.

Respectfully submitted,

MYRA JONES.

Detroit, June 15, 1892.

MUSIC.

To W. E. Robinson, Superintendent of Schools, Detroit, Mich.:

The past year the work in music has been one of good progress and satisfactory work. The regular teachers have worked earnestly and enthusiastically. It is now well settled that no other branch of education is more desirable, none other is better calculated to discipline the mind, improve the physique and elevate the morals.

Properly taught, music becomes more than an art. It must be taught in our schools not so much with the idea of producing skilled musicians, but for character and enjoyment. As an aid in School Government, the music is one of the most valuable helps a teacher can have. It arouses enthusiasm for all things beautiful, and it inspires a desire to be right and to do right.

Music creates a liking for both mental and physical discipline. It goes out daily in the minds and hearts of the pupils to continue its good work in the homes and neighborhoods.

The schools have been visited about once in three weeks, when new work is assigned and the previous lesson reviewed. We have had grade meetings, which I think have proved helpful.

I wish to thank you for your kind help during the year, and the teachers for their hearty co-operation.

Yours respectfully,

EMMA A. THOMAS,

Supervisor of Music.

WRITING.

To W. E. Robinson, Superintendent of Schools:

In placing in your hands my fifth annual report, it gives me great pleasure to say that in my judgment we have made more real advancement in writing this year than in any previous year. The teachers have seemed more interested in the work, and have taken greater pains with their own written work, especially that done upon the blackboards. It is the exception now to see any carelessly written work upon our boards.

The grade meetings which have been held this year, under the direction of Miss Coffin, have had a very beneficial effect upon the writing.

In these meetings the special teachers have had an opportunity to make suggestions and to ask and answer questions, thus bringing them into closer sympathy with the regular teachers.

The holding of these meetings on Friday afternoons has given plenty of time for the work. The teachers have felt that it was a part of their regular work, have entered into it with a great deal of enthusiasm, and have thus been stimulated to do better work.

The work of Miss Coffin as supervisor of the primary grades has been of great value, as she has looked after the details of the work and has emphasized the necessity of careful painstaking in all written work. Her influence over the teachers in this respect has grown gradually from the first.

Although we have done but little to advertise our work outside the city, yet we hear it well spoken of, and many teachers from other cities have come to visit us.

Five years we have been working to bring our writing up to a high standard—we are still reaching toward it.

The principals and teachers throughout the city have co-operated most heartily in this work, and I do not hesitate to say that we have as earnest and faithful a corps of workers as can be found anywhere.

The very superior work done by the girls from the training school speaks volumes for that institution, as well as for the girls themselves.

The training in physical culture, which the children have received from Miss Kimberlin, has been of great value in helping to secure the desired position at the desk.

We have used the pen more this year than ever before. In many of the grammar grades nearly all miscellaneous writing is now done with pen, where a few years ago it was done with lead pencil. This has been brought about without any arbitrary rule, but by simply suggesting that so far as practicable all writing be done with pen. The pupils have found that they can write better and just as easily in this way, and that it pleases their teachers better.

We still hold to the order—slates first year, lead pencils second year, pens third year; but when pens are taken up, let all writing be done with pen; and both teachers and pupils are beginning to realize that we are right.

We are delighted to see that those new window shades which roll clear up and let in God's daylight are taking the place of the old wooden blinds, which have so long darkened the upper part of the windows, thus shutting off the best light. Please let them "roll" on.

May we suggest that more care be exercised in placing seats so that the light strike desks from the left side as much as possible; also that the seats be placed according to the following schedule. The edge of desk from back of seat,

In First Grade..... 11 inches,
In Second Grade..... 11½ inches,
In Third Grade..... 12 inches,
In Fourth Grade..... 12½ inches,
In Fifth Grade..... 13 inches,
In Sixth Grade..... 13½ inches,
In Seventh Grade..... 14 inches,
In Eighth Grade..... 14½ inches,

and that when two sizes of seats are used in a room, they be placed in full rows from back to front of room instead of crosswise, as in the latter case one whole row across the room is rendered practically worthless by bringing a high seat to a low desk.

And now I wish to thank you for your very hearty support during these years which we have labored together. They are among the pleasantest years of my life as a teacher, and much of this is due to your kindness and counsel.

Very respectfully submitted,

W. F. LYON.

DEPARTMENT OF PHYSICAL CULTURE.

To W. E. Robinson, Superintendent of Schools:

DEAR SIR: I herewith submit the second annual report of the work in Physical Culture for the school year ending June 24, 1892.

During the past year rapid progress has been made in this department of school work. This is due largely to the fact that the teachers have become more familiar with the methods of teaching gymnastics, and consequently they have shown more ability in directing the exercises and criticising the work of

the pupils. Another reason for this improvement is that during the past year teachers have assembled more frequently for grade meetings, where they received careful instructions concerning the work.

One of the most pleasing and gratifying results of this training is its effect upon the regular school work and discipline. Pupils sit at their desks in comfortable and upright positions; sprawling and slouchy attitudes are rarely seen.

When standing for recitations the aim has been to have each pupil assume a proper and graceful position, with knees straight, head erect and chest forward, thereby breaking up the habit of leaning on the desk for support or standing with feet crossed, an attitude too often assumed.

During the exercises the pupils are required to give strict attention to directions, every executory command being preceded by a cautionary or preparatory command, which enables them to execute the movements promptly and in complete uniformity. Pupils soon learn to give the same attention to directions when the teacher dictates the various lessons of the day.

Much attention is given to the carriage of the body in walking; the various foot exercises tend to give lightness and elasticity of step, and pupils are taught to throw the weight of the body over the balls of the feet, to avoid a heavy tread or clumsy gait.

Exercise often fails of good results because of its character. Physiology teaches that light gymnastics are best. There should not be excess of exercise for one part of the body, although this may be necessary in cases of unbalanced organisms; but gymnastics should harmoniously exercise all muscles and improve the general health.

Regular systematic exercise produces not only a change in the physique but in the *countenance*. The eyes are brighter,

the complexion is clearer, due to the improved condition of the blood; the expression of the face is pleasanter, and shows that the whole being has been invigorated and refreshed.

The object therefore of the exercises is not to develop great strength in one set of muscles, nor to enable the pupils to show great skill in their performance, but to invigorate and strengthen the whole body, gradually bring all muscles into use, and increase respiration and circulation.

Previous to the gymnastic drill, the pupils are actively engaged in study, and consequently the brain demands an extra amount of blood to enable it to perform its work; at the time of physical exercise the blood is drawn away from the brain and that organ permitted to rest, so that when the pupil resumes his work or study, his brain receives a fresh supply of oxygenated blood, and he is better able, consequently, to perform his duties than if he had continued work with no such an interruption.

In speaking of the aim of physical training, Dr. Sargent of Harvard says: "It is in imperfect and ill-balanced organizations we find the greatest amount of sickness, *weak spots* caused by inheritance, acquired by exposure, close confinement, overwork, etc., that invite disease and death, even though the rest of the system is perfect. To attain a perfect structure, harmony in development and a well-balanced organism, is our principal aim."

All apparent physical defects of the children in our schools have been noted, and in cases of deformity, curvature of the spine, paralysis, nervousness and St. Vitus dance, the pupils have been excused from the drills entirely, or permitted to take only such exercises as would without a doubt prove beneficial.

We are glad to state that many parents have kindly expressed their gratitude to principals and teachers whenever in-

formed of the defective vision of their children, and have promptly attended to the matter. At the same time we are sorry to say that some parents have been indifferent to requests of this kind, even in extreme cases of impaired vision among their children. The hospitals kindly offered to examine and also treat the defective eyes of children in the Public Schools. In many instances, where the cases were worthy of such consideration, glasses have been furnished free of charge by these institutions.

STATISTICS.

The following statistics show the physical condition of pupils in our schools as noted during the year just closed. No instruments were used to examine the eyes of the children, hence only those cases where defective vision was very apparent to the teachers and myself have been noted.

Number of pupils having defective eye-sight, due to weakness, myopia or presbyopia	466	
Number of pupils cross-eyed	69	
Number of pupils having cataract or growth on the eye	12	
Total number that need attention	547	
Number of pupils now wearing glasses	180	
Number of pupils who have the use of only one eye	16	
	196	
Total number with impaired vision		743
Number of pupils deaf	85	
Number of pupils having defective speech	121	
Number of pupils having curvature of the spine or deformity of body	39	

Number of pupils having weak ankles, crippled hands, feet, arms or legs....	106
Number of pupils having impaired nervous system, St. Vitus dance or paralysis.....	60
Number of children having other ailments, as rheumatism, consumption, heart disease, etc., who are excused from the exercises.....	44
Number of children weak-minded.....	27
Total number of children with physical defects.....	1225
Number of children enrolled.....	25821
Number of children in normal condition and able to take the exercises.....	24596

A complete outline course of study in Physiology and ygiene has been arranged to supplement the work in Physical aining. This course extends from the chart class through l the grades to the High School. Beginning with next term achers will receive at the grade meetings explanations and ethods of teaching this course, with directions also for using e Physiological Charts. A knowledge of physical culture thout the accompanying knowledge of the laws of physiology d hygiene and the effects of exercise upon each set of organs of little value. Gymnastics taught in such a superficial anner would do more harm than good.

During the past year much attention has been given to arching Exercises. In these drills the pupils have shown eat proficiency, and as a result of this training there has been ich improvement in the order of pupils passing through the lls at the time of intermission. The pupils have taken much

pride in all their exercises and shown increased interest in the subject of physical development. A number of them took measurements of their chests at the beginning of the term in order to note their own improvement from time to time.

We hope the schools of this country will soon adopt the methods of the schools of England in the way of out door sports. There the pupils are taught during the intermissions all kinds of out-door sports and games for boys and girls, so that recess is a time of recreation and physical exercise, which furnishes a complete rest for the brain or mental faculties, it is to such training that the English youths and maidens owe their ruddy cheeks and healthy bodies.

Great changes have taken place of late years in the matter of physical education in America. Pale faces, weak and undeveloped bodies among children and young people are less common. Girls are encouraged to vie with their brothers in out door sports, with the satisfactory results that our girls of to-day are growing up to vigorous and healthy womanhood.

It was the great need of physical education for children that led our Public Schools to introduce a systematic course of study in Physical Training as a required part of school work. As to the many beneficial results of this prescribed course, every teacher who has intelligently taught gymnastics as a part of the regular work, will gladly testify.

The effect of this training upon the moral nature is to be remarked. The drills afford many excellent opportunities for teaching the virtues, self-respect, courtesy, self-reliance, prompt obedience and self-control. Tidiness of person and politeness are always commended by the teachers, and every breach of etiquette promptly checked. I was much pleased one day to see upon the blackboard in a fifth grade room this appropriate

quotation, "stillness of person and steadiness of features are signal marks of good breeding."

We believe that our teachers are putting forth their noblest st efforts to train the children of our schools mentally, physically and morally that they may grow to be well balanced men and women fitted for the highest positions of trust in all matters of true citizenship.

In conclusion I would not fail to thank you for the interest you have manifested in this department of school work nor to express my gratitude for your helpful advice, and kind co-operation at all times.

Respectfully submitted,

June 30, 1892. NETTIE D. KIMBERLIN.

EVENING SCHOOLS.

The Committee on Teachers and Schools reported in favor of opening but six of the nine buildings in use the last year, basing their opinions upon the attendance of the year before which was so irregular and vacillating.

The Board did not concur in the Committee's report but ordered the nine opened.

The three buildings which were not included in the report of the Committee were closed at the end of two months, as the attendance was too small to warrant the continuance of them.

Had the report of the Committee been adopted and the combined forces placed in the six recommended buildings, the progress of this branch of our school system would have been advanced. There should be some plan adopted whereby a more regular attendance might be had. The one in force up to two or three years ago of assessing each pupil a certain amount to act as a prepaid fine would secure this end to a

great extent. It should never have been abolished for the per cent. of attendance and regularity has steadily diminished since then.

There should be a department of instruction in mechanical drawing in the central school. This should be announced early in the season that the many young men now engaged in our various manufacturing departments may arrange to take the benefit of this course.

DETROIT NORMAL TRAINING SCHOOL.

SCHEDULE OF WORK.

FIRST TERM.

Instruction in Psychology—3 periods a week.
Theory of school—2 periods a week.
History of Pedagogy—3 periods a week.
Methods—5 periods a week.
Language—2 periods a week.
Practice for seventeen weeks.

SECOND TERM.

Students in charge of school.
Note-book work inspected monthly.
Monthly discussion of school work.
Psychology reports.
Reports on text books.

THIRD TERM.

Students in charge of school.
Monthly reports on work of children.

Lectures on methods.

Experimental and progressive work.

FOURTH TERM.

Students in charge of school.

Monthly lectures, giving generalizations from teaching experience.

Broad outlook upon educational work.

PURPOSE.

The Normal Training School has a three-fold purpose :

1. To supply efficient teachers to the graded schools of the city.

2. To aid in raising the standards and ideals of the whole teaching body.

3. To apply and test advanced pedagogical ideas, and thus prepare the way for their general introduction into the schools.

HISTORY.

The school was opened in September, 1881, in pursuance of the recommendation contained in a report of the Committee on Teachers; which was adopted in July of the same year. The report stated that "The best interests of the public schools imperatively demand that young persons seeking to become teachers should be required, before appointment, to pursue a thorough course of professional training."

During the first year the entire work of instruction and supervision was in charge of the principal, Miss Amanda P. Funnelle. In the next year, Miss Harriet M. Scott was appointed assistant, and was assigned the work of supervision of members of the class who were engaged in teaching. In 1886, Miss Funnelle resigned her position and Miss Scott was

appointed in her place; Miss M. Cordelia Heffron was made assistant. Miss Scott was given leave of absence for one year in 1890, and during that time Miss Mathilde E. Coffin held the position of principal. In 1892, Miss Regenia R. Heller was made second assistant.

The school as first organized provided that 80% of the new teachers required to fill vacancies should be taken from the training class. This was changed to 60% in 1884, and back to 80% in 1886. In 1884, any person who had served as substitute for 200 days was given a position on an equality with training school graduates. Now, those without extended experience who wish to become substitutes, must take the examination required of applicants for the training class. No compensation was given the members of the training class till 1886, when it was decided to give those teaching for their first term, $10, and for the second, $30. The salary after that time to increase according to schedule rates. Now the amount for the first term of teaching is $12, and for the second, $35. Various changes in the organization and requirements have been made, as the needs and the progress of the school have shown their necessity. These changes are explained under "Development of Work."

ORGANIZATION.

To complete the course in the Normal Training School requires at least two years. The school consists of four classes, known as Senior, Junior, A Normal and B Normal. The Seniors are those who have completed the regular course of instruction and are teaching for their third term. The Juniors and A Normals differ only in the number of terms of teaching—the Juniors teaching the second term and the A Normal

class the first. The B Normal class is the one under instruction.

A class of twenty is admitted each term.

The school is self-supporting. The amount saved to the city by the service of the pupil teachers under supervision, meets the current expenses of the school and leaves a surplus which is used for other expenses of the public school system.

One of the city schools called the Normal School, located on Miami Avenue, is used as a practice school, and the Normal Training School is located in the same building, the principal of the Normal Training School being also the principal of the practice school.

REQUIREMENTS FOR ADMISSION.

Applicants for admission to the Training Class must have completed the High School course or its equivalent, and must enter the class through a competitive examination, consisting of written tests in the legal branches and an oral examination on points of general information.

REQUIREMENTS FOR GRADUATION.

Pupil teachers must have completed a term of instruction and practice, and three terms (of five months each) of successful teaching to receive the diploma of the school.

TEACHING FORCE.

Nominally the teaching force of the school consists of the principal and two assistants. The first assistant gives her entire time to the supervision of the pupil teachers in their schools. The second assists in the instruction. In reality there should now be reckoned on the staff the teachers who are in charge of the practice room. Each room is in charge of an

able teacher. While the course of study pursued in the practice school is the same as in the other city schools, there are necessarily more demands made upon the teachers. When the rooms are being used for practice there is more or less disarrangement of work. Thus there is often demand for a change of program, considerable experimental work is called for, the planning and criticism of the practice work take extra time. Through their willing co-operation in the work of the school. aiding in the instruction of special branches, by advising with students, overseeing their work, suggesting plans for lessons, criticising, etc., the teachers of the practice school have become part of its organic structure, and in this capacity are contributing not a little to its efficiency. That there may be thorough comprehension of the work, that they may widen their experience and further in every way their own efficiency, some of the teachers have changed from grade to grade, thus gaining not only a theoretic but practical knowledge of the work below and above them. Faculty meetings are held for the advanced study of some subjects, as psychology or geography, the discussion of some article presenting progressive ideas, or general measures for securing the excellence of the school.

COURSES OF INSTRUCTION.

The courses of instruction are classed as theoretical and practical, but this division is recognized as an artificial one, and is maintained only for convenience in arranging the work. For the teacher there should be no hard and fast separation between theory and practice. The only true theory is the theory of practice, and the only true practice is the practice of theory. The constant aim of instruction given in the Training School is to make the two things one.

THEORY.

The theoretical work is given in the form of (a) lectures;) assigned readings (in standard works found in the Training hool Library and Public Library); (c) reports on the read-;s and discussion of the problems thus presented. The sub-ts are as follows:

(a) PSYCHOLOGY.—The aim of this course, which under-s the whole work of the Training School, is a study of the :ts of psychology in their bearing upon the practice of teach-;. The effort is made to discover how knowledge and action ıy react upon each other. The range of the lectures covers : main problems of what are termed instinct, sensation, con-ousness, attention, perception, memory, imagination, think-;, feeling, willing. McLellan's "Applied Psychology" is t into the hands of the class, but dependence upon any one thority is not encouraged, and the work is used rather as a ıvenient outline than as a text book. The assigned read-;s are to such standard authors as James, Dewey, Sully, dd, Murrey, Baldwin and Hoffding. Reports are called for observations on the ways of children, both in the school)m and out, and these are interpreted on psychological prin-)les. In this way the students are enabled to deduce for :mselves those methods of teaching and devices for arousing erest and exciting attention, which will result in the great-amount of power.

(b) HISTORY OF PEDAGOGY.—In the treatment of this)ject, Pedagogy is not considered as as an insolated branch knowledge, pursuing a lonely course apart from the other erests of mankind, but rather as one phase of the whole ·ward movement of civilization. The changes that have :ne about in the idea of the school are shown to spring from

contemporaneous changes in religion, philosophy, literature and politics. In connection with the study of education in Greece, special work on Socrates, Plato, Aristotle, Pythagoras is given. The subject of questioning is taken up in connection with Socrates; preliminary work on the Kindergarten, in connection with Aristotle; the cultivation of the feelings with Pythagoras. When studying Comenius, the subject of juvenile literature and illustrated text books is considered. In connection with Herbart, the present condition of European schools is discussed, and special attention given to the application of Herbart's ideas. The tendencies of our own time are noted, and an effort made to anticipate the next step in education. These points will indicate the character of the work done. The plan of instruction is similar to that pursued in Psychology. Hilman's History of Pedagogy is furnished to the members of the class, but many authorities are consulted, such as Rosenkranz, Compayre, Painter, Quick, etc. As but a part of the work can be obtained from books on the history of education, much attention is paid to current literature, notably to such magazines as The Educational Review. The Pedagogical Seminary, Popular Science Monthly, etc.

(c) THEORY OF THE SCHOOL.—The purpose of this work is to show the relation of the school to other institutions of society; specifically to the family, business life and the state. The school is the middle term between the family and citizenship. In a discussion of the home, the attempt is made to determine what habits and traits of character the home should develop on which the school may build; wherein, as experience proves, is the home influence likely to prove deficient; what must the school supply; what need it merely reinforce. Special attention is also paid to the home as reflecting our present civilization, as affected by and affecting our

national and business life. Under this head is treated the subject of moral training. The school as a means of securing freedom in environment (the free movement of the art-instinct of the child), is studied under the subjects of instruction and conduct. The various aspects of the school are taken up in order, especially its function as supplementing the family life and preparing for business life and citizenship. The present form of the school is discussed in relation to its physical conditions, mechanical workings, rules and regulations. The necessity of training teachers is shown. Turning to the qualifications of the latter, the various points to be observed, as order, instruction, language, bearing, voice, questioning, skill, tact, habit, principles, methods, devices, schedules of work, rewards, punishments, etc., are dwelt upon at length. In discussing business life, some inquiry is made into the following subjects: The origin of trade; the division of labor; the relation of business life to real living; the curriculum and discipline of the common school as a foundation for business life; the transition from school to business. Under the head of citizenship is developed the idea of rational freedom. The following are some of the principal topics discussed: The fundamental idea of the state; provision which the state makes for the individual as an outgrowth of progress in the idea of freedom; privileges and duties of citizenship; preparation which schools should furnish; evils in our national life affecting and affected by evils in the educational system; duty of teachers in preparing good citizens.

(d) METHODS.—This is a brief review of the subjects which the students are actually called upon to teach. By the aid of the working psychology they are instructed what to teach, how to present it, how to present the parts appropriate to different grades in a way to appeal to children in different

stages of development. Principles, methods and devices are discussed for recitations and seat work. The theory is connected as closely as possible with the practice.

(e) LANGUAGE.—It has been found necessary to give a special course in language as a preparation for the work now given in the school, not only under the subject of language, but in geography, history, and in fact as an aid to almost every subject. The history of language is taken up briefly under origin, classification and growth (with attention particularly to the English language). The elements of written and oral discourse, as vocabulary, sentence, paragraph, and theme, are studied with illustrations from best writers, and applied in composition work by the students. This is followed by a brief study of the history of literature and some work on the great literary bibles.

(f) SUBJECTS TAUGHT BY SPECIAL TEACHERS.—The subjects under the care of the special teachers are drawing, music, writing and physical culture. The teacher of drawing gives about two hours' instruction a week. The work in music is given by one of the teachers of the practice school, under the direction of the special teacher of music, who gives the work her personal oversight several times during the term. The time given is about fifteen minutes a day. The teacher of writing gives an equivalent of about half an hour's instruction a week, and a lesson of fifteen minutes a day is given by a teacher of the practice school. Occasional lessons in physical culture are given by the special teacher in this subject, but the work is mainly in the hands of a lady, who, under the direction of a special teacher, gives lessons of about thirty minutes each, twice a week. The students apply their knowledge of these special branches in the practice work.

DRAWING.

Instruction in this subject covers, in as comprehensive a way as a term of twenty weeks will allow, the theory and practice needed to direct the study of form, drawing and color in the primary and grammar grades, under competent supervision. Carried out on the line of Kindergarten principles in the primary grades, the immediate aim is, to have it recognized at once as a factor in education, to make the subject educational in every feature, to this important end, that teachers may broaden the scope of their instruction, placing always the concrete before the abstract, vivifying and strengthening by the aid of this branch, their daily work in reading, language, number and geography.

In addition to the regular work of the grades, therefore, numerous illustrated lessons in each of the branches taught are required, not only training the hand to execute, but developing mind-power to imagine, to originate and to adapt. The co-related subjects of construction, representation and decoration, are carefully distinguished, and under these three heads are taken up in logical order : the subject of working drawings, perspective and decorative design. Continual attention is given to color instruction, forming as it does the one feature characteristic of all form, and carrying the observer directly to nature. Color perception finds expression by aid of colored papers and tablets, to teach arrangements for borders, for rosettes and for applied designs. Advancing farther, attention is given to the use of water colors in the study of botanical analysis of plant forms from nature, and their use in decorative design. Historic ornament is finally taken up, to learn the characteristics of different styles, as the Egyptian, Greek, Roman, Moresque, Gothic and Renaissance. From flat washes in one color and

graded scales from light to dark, the advance is made to ornament in color from "Best Examples of Styles," by Owen Jones.

MUSIC.

The object of this work is to lead the students not only to a knowledge both theoretical and practical of the subject, but of its educational value, taking its place as an important part of the curriculum. A course is given the students, to insure such a knowledge of the subject as will enable them both to be able to do themselves what they will require the children to do, and also to comprehend the educational principles upon which it is based. The work is carefully graded, and covers such points as voice training, tone perception, sight singing, phrasing, modulation, writing, progressive exercises for both time and tune, selection of songs and devices, such as colors, hand-signs, etc.

PHYSICAL CULTURE.

In physical culture a course is given to secure for the students themselves health and strength. They are also made familiar with the course of exercises required in the school, together with the purpose of the exercises and way in which they should be taught.

WRITING.

This course includes instruction on letter forms, pen-holding, correct position of body, free movement exercises, blackboard writing, work of different grades, the object of the work and method of presentation.

Instruction in making out of the monthly reports, daily records of attendance, the use of the various blanks in use in the schools is given by the Superintendent, together with practical suggestions on school affairs.

PRACTICE.

During the five months of instruction there is opportunity for practice in the first five grades. Preliminary to this there is observation in some of the more important branches throughout the grades. Then as each grade is taken in turn, beginning with the first, there is observation in all the subjects of the grade. The teachers in presenting the work for observation, give typical lessons and cover as many of the difficult points as time will allow. More time is given to the first grade than to those above, for the following reasons: *First*, it is the most important; *second*, the majority of the training class are given positions in the first grade; *third*, the character of the work, since it requires exceedingly careful teaching, is an excellent preparation for higher grades; it is good economy, therefore, to give more time to this grade and less to others, and to require teachers to remain in it long enough to establish good habits. In this grade each member of the class has practice in every subject. In grades above the first the same amount of work cannot be provided for. A written plan is required for every lesson given. The topics covered in these plans are the following: general object, special object, basis of work, material used, outline of method, including devices used, and where necessary, the seat work that should follow. Some lessons are given to groups of children, some to all the children of the room. Our practice school being small, there is no opportunity for the handling of large numbers of children, an important feature in the preparation of teachers for the management of the larger schools, which some are sure to have. On the other hand, there is perhaps better opportunity to show skill in the presentation of subjects.

The practice work is observed and criticised by the principal of the Training School, an assistant, and the teacher of the room, The points of criticism cover the ground of order, instruction, spirit of work, language, voice, bearing, questioning and habits, and are based upon pedagogical and psychological principles.

SUPERVISION.

The first assistant visits systematically those under supervision, giving the greater part of her time during most of the term to the A Normal class, the members of this class being those who need the most supervision. She can visit each member of this class once in about two weeks, giving half a day to each ; later in the term visits are made to the members of other classes.

The principal gives the greater part of her attention to the seniors, or those needing special help. Her visits are necessarily shorter than those of her assistant, but an effort is made to see each one under supervision at least three times a term. Those under supervision are expected to show intelligence in attending to the physical condition of the school room, as ventilation, neatness, appearance, to care of books, care of health of children; to show skill in the mechanical working, as handling of classes, distribution of material, dismissals ; power to secure order, which permits a happy atmosphere, and in so far as the grade permits, which is self-directing, ability in instruction, which will secure power on the part of the child, Their use of language, pronunciation, voice, bearing, manner, and spirit of work or enthusiasm are also points in which the teachers are expected to maintain a high standard.

It is expected that those under supervision will attend the monthly meetings held by the principal, the purpose and character of which are explained in another place.

DEVELOPMENT OF THE WORK.

The principal advances of the school have been along the following line :

(a) The number taken into the class each term has increased from twelve to twenty.

(b) The time required for earning a diploma has been extended. At the outset pupils were granted a diploma after one term of satisfactory work, but it was found that one term of teaching enabled the teacher merely to get things in hand for her real work, that she had not organized her ideas sufficiently to allow her to be independent. It was found that teachers often lost sight of the large interests by reason of the number of necessary details in the work. Principles were allowed to give way to methods based upon imitation, and the work as a whole was not planned in such a way as to secure the best interests of the childred, and the acquisition of insight and power on the part of the teacher. Then, too, a diploma meant too much or too little. The name would seem to indicate more proficiency than had been acquired, and misrepresented the aims of the school. Since 1888, the arrangements have been as follows : After five months' instruction at the Training School, pupils are given employment as teachers. At the end of one term of successful work, certificates are granted, while the unsuccessful —if there be such—may be placed on probation for another term. The holders of certificates are entitled to work one year for a diploma. At the end of the year, on the approval of their work, they are presented with diplomas and are appointed permanently. The time of supervision was thus increased from

one to three terms. At present there are more than fifty teachers under constant supervision. To this important and arduous labor the entire time of the first assistant is systematically devoted, and as much of the principal's time as can be spared from her other work.

(c) But merely increasing the time of supervision was not sufficient. It was found that teachers must constantly be reminded of the principles underlying their work, they must be stimulated to watch the tendency of the present educational movement, broaden their knowledge of the people who had been instrumental in carrying this movement to its present condition, in order that they might anticipate something of the future, and thus see the vital relation of their work to the entire circuit of our present civilization. To this end meetings have been held with those pupils who have nominally finished the course of instruction. In these meetings certain lines of work, such as literature, history, physiology and science, as a basis for language work, have been discussed; books have been reviewed; experimental work in new fields have been required, reports of such work called for, and lectures on school management have been given.

(d) In addition, those supervising the work, since they saw so small a part, could not judge of it as a whole. To remedy this difficulty, to enable the supervisor to arrive at some just estimate of the plan of the whole, and to aid them in making such timely suggestion as would result in greater profit to teacher and school, what may be called the "Note Book System" was devised. According to this plan, all pupil teachers during one term are required to send in reports on work at stated intervals, showing what has been accomplished as to knowledge, expression, power and habits, or to keep note books in which their work is outlined for a week in advance.

In the same note book are entered reports on devices used to test power in children. Teachers are encouraged to indicate original work, and to make record of such new devices as they have found most successful.

NEEDS OF THE SCHOOL.

The school can never accomplish its full purpose until it is more thoroughly equipped for its work. The needs of the school lie along several different lines. As the members of the Training class may be placed in any grade, the training in the school should prepare for all grades. This it does in theory, but theory will not take the place of practice. There should be a Kindergarten, and the sixth, seventh and eighth grades added to the practice school. There is need now of more room for the school, both larger rooms for the different grades and more rooms for the accommodation of the school. It would be of great advantage to the school to have a building with adequant accommodations, and one planned with regards to the needs of the school. Such a building should be as centrally located as at present in order that those attending the monthly meetings may reach the building as readily as possible (the meetings are held after school hours), and that the principal may reach any building with as little loss of time as may be; also for courses of lectures and occasional lectures and meetings for all teachers. the building should be one readily accessible from all the street car lines. One especial feature of such a building should be a library and reading room, very completely equipped and open to all teachers.

The psychological ground for manual training is too well known to make any argument for it necessary. Some logical form of expression appropriate to the different subjects has for some time been incorporated as an essential feature of the work,

but the material has been supplied to a great extent by the principal and teachers. I think it time for the recognition of, and provision for this work. Natural science, which we have used to some extent as a basis for language work and the beginning work in reading and number, should, I think, he recognized as a necessary part of the curriculum, and provision made for special instruction in the subject.

The salaries of the teachers should be increased to compensate for the extra time, work and expense which their work demands. There should also be provided a monthly fund for the purchase of new books and apparatus needed. If the school is to keep up with the times, there must be some way of meeting the needs of the school in this direction as they arise. The circumlocution necessary to get funds from the Board prevents the use of such material at the time when it is most needed. It is not just that this expense should be met, as it has been in the past, to a great extent, by the principal of the school.

Another line of needs has reference to the qualifications of those entering the Training Class. It is a detriment to the members of the school, and so to the public schools, that those entering the Training Class have, almost without exception, no knowledge of the special branches, drawing, music or physical culture, which no less than the common branches they are expected to teach. If they could have what is usually required in high schools in these branches, before they enter the Training Class, it would put the work in these branches on the same basis as the work in other subjects.

UNGRADED SCHOOL.

The work of this school has been very satisfactory, both in progression and the manifested effect upon the class that are

eligible to this department, who are returned to their respective districts in the regular schools.

Occasionally it is necessary to re-commit one who has been a member of this school. The total enrollment of this school during the year was 375, of which 343 were boys and 32 girls, and were derived from the following sources: 118 were received by transfer from other city schools, and 257 were taken from the streets and alleys. The enrollment has increased over that of last year 68, owing to the increased facilities for handling this class, and the increase of population.

Of the entire enrollment, 123 were in attendance at close of the year, 94 were returned to the city schools, 23 left the city, 123 are at work, and 12 have been sent to the State Reform School.

A strong and effectual effort should be made during the next session of the Legislature to have a truant law that shall aid us in compelling all incorrigibles and juvenile disorderly boys and girls to attend this or some other public school. Under the present act only such children whose parents are willing to aid us in carrying out the interest of this law can be controlled.

During the year, the officers have made 5,407 visits of inquiry, investigated 1,931 transfers that have been reported, served 532 notices, and reported 457 truants.

The growth of the city has been so rapid since the organization of this school that the one school now centrally located is too far from the extreme points of the city limits for an officer to look closely after those living in those remote districts; consequently, if a pupil is not closely watched who is permitted to remain from school even for a day, will at once recognize the fact that only semi-occasionally he will be looked after. Even should the officer go every morning, the

distance is so great that half of the session is gone before he can reach this school with the pupil.

I would recommend two branch schools; one in the northwestern, the other in the northeastern part of the city, with truant officers to look after them, keeping the same force for the central school.

ENROLLMENT, ATTENDANCE, ETC., IN EACH SCHOOL.

SCHOOLS.	Total enrollment including duplicates on account of transfers.	Average membership.	Average Attendance.	Number of Teachers June 30, 1882.
Bagley	494	286	268	7
Barnbow	975	518	487	14
Bellefontaine	956	539	506	12
Bellevue	259	140	132	3
New Bellevue	64	39	33	1
Bishop	2143	1036	980	25
Brownson	595	309	290	7
Campbell	570	256	227	7
Cass	2128	980	929	25
Chaney	483	280	261	7
Clay	753	345	323	9
Clinton	947	397	360	9
Craft	341	171	161	4
Custer	82	53	49	2
Dickinson	549	294	278	9
Duffield	1615	804	765	19
Everett	771	436	408	13
Farrand	393	235	220	7
Ferry	594	261	235	9
Firnane	589	263	244	6
Franklin	557	267	245	7
Garfield	154	76	69	3
Hancock	292	154	142	4
Hickey	226	117	108	4
Houghton	901	434	411	14
Hubbard	514	273	254	7
Irving	1105	586	551	15
Jackson	603	290	268	8
Jefferson	1538	718	668	18
Johnston	347	207	193	4
Lincoln	674	357	347	9

ENROLLMENT, ATTENDANCE, ETC.,—CONTINUED.

SCHOOLS.	Total enrollment including duplicates on account of transfers.	Average membership.	Average Attendance.	Number of Teachers June 30, 1902.
Livernois	201	85	75	2
McKinstry	529	271	254	8
Miami	375	117	90	5
Newberry	858	440	417	14
Nichols	528	273	253	7
Normal	242	129	121	7
Norvell	1141	621	600	14
John Owen	694	350	332	9
Palmer	476	252	237	7
Pitcher	974	555	528	15
Potter	533	255	237	7
Roberts	514	257	242	8
Russell	735	318	298	9
Tappan	1549	692	669	18
Tilden	1166	712	666	15
Trowbridge	851	430	413	14
Van Dyke	640	423	394	12
Washington	1037	553	511	14
Webster	2143	962	902	21
Wilkins	1061	443	421	13
Williams	726	277	260	11
High	1219	935	911	37
Specials				8
Totals	40,570	20,460	19,241	563

The sum of the enrollments in all the schools, including transfers from one school to another or from one room to another in the same school, is as shown above 40,570

Deduct on account of duplicate enrollments 14,749

Actual number of different names enrolled in all the schools during the year 25,821

'EMENT OF PROMOTIONS (HALF YEARLY) FOR THE SCHOOL YEAR ENDING JUNE 30, 1882.

CHOOLS	GRAMMAR GRADE.			PRIMARY GRADE.			WHOLE SCHOOL.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
y				413	72	286	413	72	286
ow	395	74	269	358	72	240	753	73	518
fontaine	199	89	113	500	60	425	708	68	538
vue				198	71	140	198	71	140
vue, New				45	58	39	45	58	39
p	651	83	393	984	76	643	1634	79	1036
nson				306	59	209	306	59	209
bell				292	57	256	292	57	256
	856	74	595	575	73	395	1441	74	990
ey				329	59	280	329	59	280
	71	96	37	493	80	308	564	82	345
on				525	68	387	525	68	387
				258	75	171	258	75	171
r				90	85	53	90	85	54
nson	139	87	90	296	69	214	435	74	294
ld	692	86	401	608	83	403	1360	85	804
tt	230	71	161	396	72	275	626	72	436
nd	131	80	82	230	75	153	361	77	235
	33	66	25	274	58	236	307	59	261
ne				371	71	263	371	71	263
klin	67	82	41	329	73	226	396	74	267
eld				117	77	76	117	77	76
ock				216	70	154	216	70	154
ey	26	93	14	134	65	103	160	68	117
hton	184	83	111	500	77	323	684	79	434
ard				398	71	273	398	71	273
k	557	80	346	415	87	240	972	83	586
on				409	71	290	409	71	290
son	513	75	340	591	78	378	1104	77	718

STATEMENT OF PROMOTIONS—Continued.

SCHOOLS.	GRAMMAR GRADE.			PRIMARY GRADE.			WHOLE SCHOOL.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Johnston				254	61	207	254	61	207
Lincoln				366	51	357	366	51	357
Livernois				68	40	85	68	40	85
McKinstry	35	76	23	364	73	248	429	79	271
Newberry	195	94	104	482	72	336	677	77	440
Nichols				401	73	273	401	73	273
Normal	40	83	24	153	73	105	193	75	129
Norvell	192	81	118	592	59	503	785	63	621
John Owen	74	79	47	473	78	303	547	78	350
Palmer				375	74	252	375	74	252
Pitcher	385	81	238	460	73	317	845	76	555
Potter				253	50	255	253	50	255
Roberts	78	93	42	268	62	215	346	67	257
Russell				439	69	318	439	69	318
Tappan	430	82	262	585	68	430	1015	73	692
Tilden	416	77	269	636	72	443	1052	74	712
Trowbridge	341	82	209	309	70	221	650	76	430
Van Dyke	285	85	167	402	79	256	687	81	423
Washington	364	80	228	522	80	325	886	80	553
Webster	770	94	410	815	74	552	1621	84	962
Wilkins	260	82	158	505	89	285	765	86	443
Williams	59	102	29	348	70	248	407	73	277
Totals	8,680	81	5,326	19,836	72	13,833	28,583	74	19,408

GENERAL SCHOOL STATISTICS FOR THE SCHOOL YEAR ENDING JUNE 30, 1892.

1.	Population of the City of Detroit	250,000
2.	Valuation of the property of the City	$175,450,310.00
3.	Amount of levy for all municipal purposes	$2,934,555.00
4.	Amount of levy for the current expenses of the Public Schools	$367,643.00
5.	Amount received from sale of bonds, school sites and buildings	$150,000.00
6.	Amount of levy for all school purposes	$517,643.00
7	Per cent. of school taxes upon entire municipal levy	17.63
8.	Amount of money received from primary school fund	$109,244 75
9.	Whole cost of superintendence and instruction, including evening schools	$363,972.68
10.	Whole cost of incidentals, including all current school expenses, except those named in 9, above	$90,605.11
11.	Amount paid for sites and school buildings	$58,762.60
12.	Average weeks of membership of each pupil enrolled	31.6
13.	Average weeks of attendance of each pupil enrolled	29.7
14.	Average salary of all teachers, including principals, first assistants and specials	$626.48
15.	Average salary of all teachers, excluding principals, first assistants and specials	$546.63
16.	Total cost of tuition in evening schools	$8,514.50
17.	Total cost of tuition in ungraded schools	$4,375.00
18.	Per cent. of promotions on average membership	74

GENERAL SCHOOL STATISTICS FOR THE THREE DEPARTMENTS FOR SCHOOL YEAR ENDING JUNE 30, 1892.

	Primary Grade.	Grammar Grade.	High School.	Total and Average.
1. Number of different names enrolled	18,710	6,081	1,030	25,821
2. Average membership for the year	14,190	5,326	935	20,451
3. Average daily attendance for the year	13,204	5,067	910	19,181
4. Per cent. of attendance on membership	93	95.1	97.4	93.7
5. Number of pupils in membership at close of year	13,816	4,926	882	19,624
6. Number of male teachers, including Superintendent	4	11	9	24
7. Number of female teachers	337	175	25	537
8. Average number of teachers, excluding Superintendent and Special Teachers	328	177	34	539
9. Average number of teachers, including Specials				548
10. Average number of pupils to the teachers, excluding Specials	43.2	30.1	27.4	37.9
11. Cost per capita for instruction	13.36	20.93	36.66	17.16
12. Cost per capita for incidentals, based on average membership	4.43	4.43	4.43	4.43
13. Cost per capita, including all current expenses, except money invested in school buildings	17.79	25.36	41.09	21.50
14. Cost per capita in Ungraded Department				52.10
15. Number of days the schools were actually in session				191

SCHOOL CENSUS FOR THE LAST FIFTY YEARS.

YEAR.	Census.	YEAR	Census.
.....	2,093	1867.....	21,742
....	2,239	1868.....	22,810
.....	2,578	1869.....	27,039
....	3,146	1870.....	26,641
.....	3,426	1871	28,779
....	3,882	1872.....	30,230
....	5,846	1873.....	31,936
....	6,546	1874.....	33,772
... .	6,306	1875.....	34,593
....	6,965	1876.....	35,172
....	7,253	1877.....	35,739
.....	7,883	1878.....	35,962
....	8,520	1879.....	37,684
....	9,983	1880.....	39,467
....	9,912	1881.....	37,926
....	10,502	1882.....	40,201
....	12,688	1883.....	43,840
....	13,138	1884.....	45,641
... .	13,208	1885.....	53,049
....	14,159	1886.....	56,488
....	14,146	1887.....	66,963
....	15,388	1888.....	65,132
.....	16,473	1889.....	63,009
....	17,389	1890.....	72,673
.....	18,710	1891.....	80,500
....	20,350		

The following table shows the different salaries paid per school month, and the number of teachers to whom certain salaries are paid, according to the pay roll of June, 1892.

19	Teachers	at	$ 12 00
9	"	"	30 00
28	"	"	35 00
52	"	"	40 00
44	"	"	45 00
46	"	"	50 00
37	"	"	55 00
2	"	"	57 50
39	"	"	60 00
24	"	"	62 50
12	"	"	65 00
18	"	"	67 50
15	"	"	70 00
94	"	"	72 50
2	"	"	75 00
37	"	"	80 00
11	"	"	85 00
2	"	"	87 50
14	"	"	90 00
9	"	"	100 00
3	"	"	120 00
1	"	"	125 00
12	"	"	130 00
3	"	"	140 00
2	"	"	150 00
2	"	"	160 00
2	"	"	180 00
3	"	"	200 00
1	"	"	275 00

SCHEDULE OF ANNUAL SALARIES OF TEACHERS.

HIGH SCHOOL.

Principals, grade principals and teachers at the head of special partments, as agreed upon.

her Assistants in the High School—

For first year of service	$600 00
For second year of service	650 00
For third year of service	700 00
For fourth year of service	750 00
For fifth year of service	800 00

gular rates for primary and grammar school teachers—

r first year of service in the Detroit Public Schools	$350 00
r second year of service in the Detroit Public Schools	400 00
r third year of service in the Detroit Public Schools	450 00
r fourth year of service in the Detroit Public Schools	500 00
r fifth year of service in the Detroit Public Schools	550 00
r sixth year of service in the Detroit Public Schools	600 00
r seventh year of service in the Detroit Public Schools	650 00
r eighth year of service in the Detroit Public Schools	700 00
r ninth year of service in the Detroit Public Schools and after	725 00
st Assistants in buildings of twelve or more rooms per year,	800 00
achers of half-day schools having more than seventy-four pupils in attendance, in addition to regular rates, per school month	5 00

PRINCIPALS.

Principals of schools of less than six rooms, $800; per year; of rooms, $850; of eight rooms, $900; from nine to eleven rooms, 100; from twelve to fourteen rooms, $1,300; from fifteen to seven n rooms, $1,600; of eighteen or more rooms, $2,000.

In case one or more rooms shall be unoccupied in any building six or more rooms, $2.50 shall be deducted from the monthly salary the principal for each unoccupied room,

REPORT OF THE PRINCIPAL OF THE HIGH SCHOOL.

DETROIT HIGH SCHOOL.

Superintendent W. E. Robinson:

I herewith submit my annual report as principal of the High School.

If growth were to be accepted as a measure of success, the school could be said to have completed another in a series of very successful years.

The tables on pp. 126 and 127 will show the enrollment by grades, and that on p. 128 will show the growth of the school for the past two years. In this connection, your attention is called to my report of last year, in which some important facts are mentioned bearing on the growth as shown in this table.

This continued growth also serves to emphasize what has been said before with regard to the need of additional accommodations. At the beginning of the Second Semister of last year we were obliged to fit up the girls' cloak room for the Ninth Grade as a room for the teacher of Rhetorical work for that grade. The teacher of this subject for the Twelfth Grade has had to hear rehearsals in the front entrance hall, and to meet his pupils in the assembly room with other work going on at the same time. The problem of room for the First Semester of the coming year will be a very difficult one to face, and that for the Second Semester seems almost insoluble unless the rooms now occupied by the Supervisor's office can be devoted to school use. It should seem that this plan would be preferable to a division of the school before new buildings are provided. The school is to be congratulated on the fact that after many

TABLE OF MEMBERSHIP IN THE HIGH SCHOOL BY CLASSES AND COURSES OF STUDY.

COMPLETE ENROLLMENT FOR FIRST SEMESTER, 1891-92.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH.			COMMERCIAL.			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	9	2	11	29	40	69	37	10	47	28	86	114	27	4	31	2	9	11	132	151	283
9 A	8	3	11	22	31	53	18	5	23	9	55	64	13	5	18	4	6	10	74	105	179
10 B	9	2	11	19	24	43	11	3	14	7	41	48	8	1	9	4	10	14	58	81	139
10 A	13	3	16	12	15	27	6	4	10	12	36	48	6	2	8	5	7	12	54	66	120
11 B	9	6	15	5	10	15	6	1	7	9	20	29	3	4	7	1	16	17	33	57	90
11 A	4	.....	4	6	7	13	3	3	6	5	26	31	2	1	3	2	.....	2	22	37	59
12 B	12	2	14	8	10	18	6	1	7	3	28	31	1	.....	1	.....	2	2	30	43	73
12 A	4	2	6	2	1	3	2	.....	2	4	8	12	.....	2	2	.....	.....	.....	12	13	25
P. G	.....	.....	.....	1	3	4	.....	1	1	1	6	7	.....	.....	.....	.....	.....	.....	2	10	12
Total	68	20	88	104	141	245	89	28	117	78	306	384	60	19	79	18	50	68	417	563	980
Graduated	5	2	7	4	1	5	4	.....	4	2	10	12	.....	2	2	.....	.....	.....	15	15	30

TABLE OF MEMBERSHIP IN THE HIGH SCHOOL BY CLASSES AND COURSES OF STUDY.

COMPLETE ENROLLMENT FOR SECOND SEMESTER, 1891-92.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH.			COMMERCIAL.			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	10	4	14	32	50	82	39	12	51	31	86	117	23	7	30	5	11	16	140	170	310
9 A	6	2	8	16	33	49	19	7	26	13	58	71	21	6	27	1	6	7	76	112	188
10 B	6	4	10	11	31	42	18	3	21	8	43	51	12	2	14	4	9	13	59	92	151
10 A	11	0	11	18	18	36	10	5	15	4	35	39	2	2	4	5	6	11	50	66	116
11 B	8	0	8	10	20	30	1	3	4	11	25	36	4	2	6	4	16	20	38	66	104
11 A	4	5	9	7	7	14	8	2	10	1	18	23	3	2	5	2	2	4	29	36	65
12 B	6	3	9	4	5	9	2	4	6	3	26	29	3	1	4	0	2	2	18	41	59
12 A	9	0	9	7	8	15	4	1	5	1	19	20	0	0	0	0	0	0	21	28	49
P. G	4	0	4	0	2	2	0	0	0	1	8	9	0	0	0	0	0	0	5	10	5
Total	64	18	82	105	174	279	101	37	138	77	318	395	68	22	90	21	52	73	436	621	1057
Graduated	12	3	15	7	9	16	4	1	5	3	24	27	1	0	1	0	0	0	27	37	64

TABLE SHOWING BY GRADES AND CLASSES THE WHOLE NUMBER ENROLLED IN THE HIGH SCHOOL, AND THE NUMBER GRADUATED FOR EACH SEMESTER OF THE PAST NINE YEARS.

TERM ENDING.	9 B.	9 A.	10 B.	10 A.	11 B.	11 A.	12 B.	12 A.	Special.	P.G.	Total.	Total Enrollment for Year.	Graduated.	Graduated Total for Year.
January, 1883.	129	117	86	62	51	45	59	25	37	9	620		23	
June, 1883.....	153	97	70	61	44	45	37	54	100	12	673	702	40	63
January, 1884.	131	104	86	54	43	35	48	30	68	15	614		29	
June, 1884.....	116	103	66	65	43	27	28	48	110	9	614	743	47	76
January, 1885..	100	86	63	70	62	28	24	28	73	8	602		24	
June, 1885.....	195	119	96	76	40	68	23	31	23	12	683	784	24	48
January, 1886..	181	110	109	67	67	44	45	20	28	16	687		17	
June, 1886.....	181	121	101	85	63	50	40	43	28	13	725	839	35	52
January, 1887..	176	108	86	89	81	37	43	34	23	8	685		29	
June, 1887.....	168	126	83	76	91	56	27	44	24	17	712	833	34	63
January, 1888..	160	114	75	70	77	63	48	29	27	11	674		24	
June, 1888.....	206	107	87	76	56	63	62	43	41	14	755	859	36	60
January, 1889..	228	137	87	61	73	45	56	49	25	14	775		43	
June, 1889.....	236	137	110	77	66	54	39	56	29	27	931	953	51	94
January, 1890..	249	158	112	87	75	44	59	33	0	17	834		31	
June, 1890.	276	153	147	102	82	52	61	16	0	10	899	1042	36	67
January, 1891..	278	188	135	101	83	68	48	16	0	16	935		24	
June, 1891.....	279	191	159	101	72	67	62	28	0	14	973	1144	39	63
January, 1892..	284	178	130	121	90	59	74	24	0	12	980		30	
June, 1892.....	310	188	141	116	104	65	59	40	0	15	1057	1219	64	94

failures an appropriation has at last been secured for a new High School or new high schools. Still, it must be said that the amount available after the purchase of the necessary siet will probably prove entirely inadequate to the completion and proper equipment of the buildings proposed.

MANUAL TRAINING.

A notable event of the past year has been the securing by subscription of a fund of one hundred thousand dollars for the equipment of a Manual Training School. It is to be hoped that some arrangement may be perfected by which this school shall be built in connection with the new Central High School.

Detroit is far behind other cities of its rank in this important educational movement. The evidence of teachers everywhere is to the effect that the manual training school strengthens the ordinary high school work, and that it affords fine educational advantages for a large class of boys to whom the more essentially literary phase of education is distasteful.

It should seem that the opposition to manual training schools comes from a misconception of what such schools seek to do. It is not their aim to take the place of ordinary education. It is not supposed by anyone that the mere training of the hand will take the place of a thorough training of the brain. But it is true that the training of the hand to do something accurately and thoroughly cannot be accomplished without an incidental training of the brain. It is true also that the mere theoretical teaching from books tends to make a one-sided man. It is the aim of manual training to bring out all the skill that is in a man. It is carried on in connection with the ordinary school work, and experience shows that it is eagerly sought by girls and boys who without it would spend hours of every day in idleness or worse.

The aim of the Manual Training School is not to teach trades. It is not a trade school in any sense. Its aim is simply education, the development of that part of man which the mere academic education of the past has ignored. It seeks the development of a well rounded man or woman, one whose hand is the servant of his brain. The manual training school is necessarily the foe of poor workmanship in any branch of industry. Its students have trained eyes that lead them to discriminate between good and poor mechanical work. But in this very training they have learned to appreciate good workmanship, and hence to have a higher respect for a good workman. They have learned that skilled mechanical work is necessarily the product of intelligence, and thus labor is in their eyes dignified. The skilled mechanic should logically be the staunchest friend of the Manual Training School.

NORMAL TRAINING SCHOOL.

I wish to repeat the recommendation made a year ago that graduates of the High School who receive recommendations to the University, be admitted to the Normal Training School without examination. So far as mere scholarship is concerned, certainly such students would be prepared to enter the school. At present, as pointed out last year, our relations to the University are closer than they are to this school, which is a part of the city public school system.

TEACHERS.

At the beginning of the last year the school began with an unusual number of new teachers. Three more were added during the year. The work of these teachers has in the main been thoroughly satisfactory. Three of our teachers had leave of absence for the year, one to spend the year in Europe,

another for rest and travel in the West, and a third for a year's study at the University. Two of these will resume their work in the school at the beginning of the next semester. The importance of procuring experienced teachers for vacancies is becoming more important as the school increases in size. It is impossible at present for a principal to give the detailed supervision of all the work that might be desirable. The school must suffer, therefore, if a considerable number of inexperienced teachers be added at one time. Successful experience is the best possible recommendation for a teacher. A broad culture should also be demanded. Many of our best high schools appoint none but college graduates. While this may tend to raise the standard of teaching, it is a rule which I should hate to see enforced. It would often make impossible the appointment of a person who might be the best possible person for the place to be filled. It is safe to say that some of the strongest teachers of the state are among those who have not had advantages of college training.

SUPERVISION OF STUDENTS WORK.

Few large schools do as much to look after students as individuals as we do here. With our large numbers this individual work is very difficult, but we feel that it must not be neglected. At present teachers report monthly to grade principals concerning the work of all students. These reports are consolidated by grade principals, and thus offer a basis for judging of the general character of a student's work. If it is unsatisfactory in several quarters, he is warned by the grade principal, and if he has fallen into false habits of study, every effort is made to set him right. If work is still unsatisfactory his parents are notified, and, when possible, their co-operation is obtained in securing satisfactory work.

GRADUATING EXERCISES.

An important change was made this year in the plan for the Graduating Exercises of the June Class. The exercises were divided, Class Day Exercises being held by the class on one day, and the Graduating Exercises proper following, the next day. For the Class Day, the Michigan Yacht Club House at Belle Isle was procured, and a most enjoyable afternoon and evening were spent by the class. The main feature of the Graduating Exercises was an address by Professor Charles M. Gayley, of the University of California. Essays by the class were omitted. With the growth of the school some such plan as this would become inevitable, and it is perhaps well that the movement toward its adoption originated with members of the Graduating Class. It is recommended that the plan be continued hereafter.

Very respectfully yours,

FREDERICK L. BLISS,

Principal of the High School.

In closing this report I desire to express my obligations to the Board of Education for their co-operation with me in my endeavor to promote the welfare of the schools, and wish to commend the principals and teachers for their faithful and efficient services.

Very Respectfully yours,

W. E. ROBINSON,

Superintendent of Schools.

APPENDIX TO REPORT OF SUPERINTENDENT OF SCHOOLS.

OUTLINE OF THE COURSE OF STUDY

FOR

PRIMARY AND GRAMMAR GRADES.

B CLASS—FIRST GRADE.

LANGUAGE.—Daily work in copying sentences from the ackboard. Capitalization and punctuation of simple sen-nces taught by imitation.

Daily lesson in oral language; lead children to express emselves clearly, correctly and completely in these conversa-on lessons.

Material for oral lessons:

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Fairy stories and myths.
5. Elementary Physiology.
6. Picture lessons.
7. Poems.

READING.—

Appleton's Chart, 25 lessons.

Appleton's First Reader, 25 lessons.

Barnes' First Reader, 25 lessons.

Supplemental work:

Harper's First Reader, 25 lessons.

Normal Course First Reader, 25 lessons.

Blackboard lessons.

See detailed course in reading.

SPELLING.—Vocabulary consists of all new words in read-g work of grade as outlined in detailed course,

Children should copy correctly in sentences all words in grade vocabulary, also write from dictation all words in chart vocabulary.

Spell by sound all analyzed words.

NUMBERS.—1 to 6 inclusive, all combinations.

Fractions.—$\frac{1}{2}$ and $\frac{1}{4}$.

Compound Numbers.—Pint, quart, 2 pints = 1 quart; linear inch, square inch; pieces of money, one cent, two cents, three cents, one dollar, two dollars, three dollars; postage stamps, one cent and two cents.

Measures by inches to six inches.

Measure by square inches to six square inches.

See detailed course in numbers.

PHYSICAL CULTURE AND PHYSIOLOGY.—Simple limb movements, also correct sitting and standing positions. See work of grade in detailed course.

Names and number of different parts of the body.

The Eyes.

1. Importance and situation.
2. How injured by abuse.
3. Training of eyesight.

The Ears:

1. Importance and situation.
2. How injured by abuse.
3. Care of ears.

Smell and Taste :

1. Uses of these senses.
2. Care of these senses.

Illustrations from chart.

WRITING.—Slates of proper size ruled with slate-rulers; pencils long and well sharpened : correct position of body, feet

and arms, with pencil pointing over right shoulder, and wrist up from the desk.

First two weeks.—Thorough drill upon simple exercises to secure freedom of motion and control of the pencil.

Make the letters i, u, w, n, m, v, o, e, c, a, x, two spaces high, and r, s, two and one-half spaces high in first practice. Complete alphabet of small letters by the close of the twelfth week. Begin writing words as soon as enough letters have been learned to make a word. Do not allow children to write words in which there are letters that have not been given in a writing lesson. Teach such capitals as are necessary for the work.

Use counting exercises when they are helpful.

Allow no careless work at any time.

Music.—Scale and interval drill; rote songs for recreation and to establish a proper use of the voice. For interval drill see Veasie's Primer. For rote song select those of high rather than low pitch.

Drawing.—In connection with the study of type forms as prescribed in detailed course of study, terms of Location, Direction and Position should be learned.

Teach expression of form in three ways: By Making, by Drawing and by Language.

No drawing or pencil holding as an exercise *in itself* should be required for the first ten weeks, but tracing on models in the air and on desks, and work at the blackboard should be practiced in order to deepen the impression of form.

Tablets may be used when the faces of models are studied, or about the eighth week of school.

The twelfth and sixteenth weeks should be spent in reviews, thereby strengthening the pupils in the main features of the work.

Specimens of pupils' work should be collected by the close of each term. This should consist of clay modeling, paper folding of strips and of strips to form hollow cylinders and cubes, pasting tablets for borders, for objects and for views of models: stick laying for borders and objects; and drawings on paper. All of this work will be found to be carefully prescribed in the Manual, "Use of Models," and detailed course of study.

A CLASS—FIRST GRADE.

LANGUAGE.—Daily work in copying sentences from blackboard.

Daily work in copying sentences from dictation.

Teach the use of the capital at the beginning of a sentence, also the use of the period and the interrogation point at the end of a sentence.

Daily lessons in oral language, lead the child to express himself in complete statements in these lessons, also give special attention to his oral expression in all lessons.

Material for oral language.

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Begin the writing of short original statements in connection with this oral work.

Have children reproduce the fables and historical stories after they have become familiar with the thought.

Select poems, have children learn them, also tell them in their own language.

READING.—

Appleton's Chart, completed.

Appleton's First Reader, Part I, completed.

Barnes' First Reader, Part I, completed.

Supplemental work:

Harper's First Reader, Part I, completed.

Normal Course First Reader, pp. 26-75.

Blackboard lesson.

See detailed course in reading.

SPELLING.—Grade Vocabulary—all new words in reading lessons as outlined in detailed course.

Pupils should write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words in grade vocabulary.

NUMBERS.—Review B, First course. Teach 7 to 10 inclusive, all combinations.

Figures to 10 inclusive. Roman notation to 10 inclusive, and signs $+$, $=$, $\times$, $-$, and $\div$.

Fractions.—$\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{10}$.

Compound Numbers—Linear foot, square foot and cubic inch.

10 cents = 1 dime, 10 dimes = 1 dollar.

5 nickles = 1 quarter, 4 quarters = 1 dollar.

2 half dollars = 1 dollar; also 7 days = 1 week, 4 weeks = 1 month, and 4 quarts = 1 gallon.

Measure by inches to 10 inches, by feet to 10 feet, by square inches to 10 square inches.

Buying, selling and making change.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Simple limb movement as given in the preceding class. Additional movements for trunk and limbs. Sitting and standing position.

See detailed course.

The Lungs:

1. Difference between inspired and expired air.
2. How the air is prepared for the lungs in its passage through the nostrils. Bad effects of breathing with mouth open.

The Skin:

1. Structure and use as a covering.
2. Perspiratory glands, their use, effects if these glands are closed.
3. Bathing and care of skin.

Illustrations from chart.

WRITING.—Perfect position at desk whenever any writing is done. Slate always in position with pencil pointing over the right shoulder.

First two weeks thorough drill upon simple exercises with counting. Count fast enough to secure a good, easy writing motion.

Review small alphabet first six weeks.

Begin work upon capitals third week.

Write words and sentences beginning with capitals.

Allow no capitals used, in any work, different from those given in the writing lesson.

Use blackboard freely. Teachers should never allow themselves to do any careless work upon the boards at any time.

MUSIC.—Scale and interval drill.

Time—Children should be taught to beat the time. Two, three and four part measure, having one note for every measure.

Rests.

Simple staff exercises, mostly in key G. Teacher to report the number of pupils who can sing the scale and those who cannot.

DRAWING.—The work in this grade should be done upon blackboard and paper.

Require all drawing to be made of lines of definite lengths. Longest lines on paper should not be less than four inches.

Special drill on pencil holding and movement. Seek for freedom of expression.

Lead pupils to find their own errors.

In paper folding have some definite aim.

The summary of the term's work should consist of specimens of work done by pupils in clay modeling, paper folding of squares and strips to form hollow cubes, and square and triangular prisms; pasting tablets for borders, for rosettes, to represent objects and for views of models; stick laying to represent objects and for borders; and drawing on paper.

This work is carefully prescribed in Manual, "Use of Models," and in the detailed course of study.

B CLASS—SECOND GRADE.

LANGUAGE.—Daily work in copying sentences. Daily work in writing sentences from dictation.

Teach use of period and interrogation point at end of sentence.

Teach use of capital letter at beginning of a sentence, also in writing names of persons.

Daily lessons in oral language, giving special attention to correct and complete statements.

Material for oral language :

1. Form—see detailed course.
2. Geography—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Daily work in the writing of short, original statements in combination with this oral work and the work in reading.

Have children reproduce orally the fables and historical stories.

Poems should be carefully selected, children should learn their meaning, and then commit them to memory.

Special attention to language used by pupils in all recitations.

READING.—

Appleton's First Reader, Part II.

Barnes' First Reader, Part II.

Appleton's Second Reader, 10 lessons.

Barnes' Second Reader, 10 lessons.

Supplemental work.

Harper's First Reader, Part II.

Normal Course First Reader, Completed.

See detailed course in reading.

SPELLING.—Vocabulary—all new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words in vocabulary, also analyze new words composed of familiar sounds.

NUMBERS.—Number work. 11 to 18 inclusive, all combinations. Review first grade work.

Notations.—Figures and Roman notations to 18 inclusive. Develop idea of tens and units.

Fractions.—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$ and $\frac{1}{10}$.

Compound Numbers.—Peck, yard, square yard and cubic inch.

12 inches = 1 foot.

3 feet = 1 yard.

12 things = 1 dozen.

12 months = 1 year.

9 square feet = 1 square yard.

Measure:

By inches to 16 inches.

By feet to sixteen feet.

By yards to 16 yards.

By square inches to 16 square inches.

By square feet to 16 square feet.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Finger, elbow, shoulder, and whole arm movements, also toe-standing or heel-elevation.

Correct standing and sitting positions, also carriage of the body in walking.

Breathing exercises. Caution against voluntary movements of shoulders or body during inspiration.

See detailed course.

Bones and Muscles:

1. Structure and uses of each.
2. Development of muscles; effect of exercise upon the same.
3. Growth of the bones.

Illustrations from chart.

WRITING—Perfect positions. Correct pencil holding. Show the exact position of hand, fingers and pencil and insist upon every one doing this part of the work.

Practice book No. 1; lead pencils.

First two weeks of term use simple drill exercises, giving more attention to position and pencil holding and free movement than to the exact forms of letters. Do not allow any careless work at any time. Use blackboard freely. Send a portion of the class to the board each day. Criticise the work on board. Ask pupils to criticise one another's work. Review small and capital letters in words and sentences.

Write specimens at beginning of each month, keeping first one written to compare with last. Send others home.

MUSIC.—Interval practice continued. Exercise pupils daily in practice upon the ladder and with manual signs in key C or D. Teach the pitch names, a, b, c, d, e, f, g.

A few more simple varieties of two, three, four and six part measure. Exercise from the staff to illustrate what is known of time and tune.

DRAWING.—Teach expression of form by Making, by Drawing and by Language, as in First Grade.

Teach by comparison. Special drill for pencil holding and free movement.

Lines of definite lengths.

Drawings large, both on blackboard and on paper.

Appearances and face views carefully expressed.

Special attention to the description of mental images of solids.

Lead pupils to detect their own errors.

Teach proportion.

The summary of the term's work should consist of specimens from each pupil in clay modeling, paper folding of squares and strips to form hollow models, pasting tablets for borders, for rosettes, for objects, and for views of models, stick laying for borders and for objects, and drawing on paper.

The detailed course of study with the Manual, "Use of Models," prescribes the daily lessons for this grade.

A CLASS—SECOND GRADE.

LANGUAGE.—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the comma before and after the name of a person addressed.

Teach the use of the capital in writing the names of the months and the days of the week; also in writing the pronoun I.

Daily lessons in oral language; aim for accurate and complete statements.

Material for oral language:

1. Form—see detailed course.
2. Geography—see detailed course.
3. History stories.
4. Fables and myths.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Daily work in the writing of original statements, in connection with oral language and reading lessons.

Daily work in the oral reproduction of the thought of the reading lessons.

Poems carefully selected, thoroughly studied and then committed to memory.

Careful attention to language used by pupils in all recitations.

READING:—

Appleton's Second Reader, Lessons XI to XXXVI.

Barnes' Second Reader, Lessons XI to XXXVI.

Supplemental work:

Harper's Second Reader, Part I.

Normal Course Second Reader, 72 pages.

See detailed course in reading.

SPELLING.—Vocabulary—all new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words; also analyze new words composed of familiar sounds.

NUMBERS.—Number work, 18 to 30 inclusive, special attention to multiples.

Notation.—Read and write numbers to 100; Roman notation to 35.

Fractions.—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$ and $\frac{1}{10}$.

Compound Numbers.—Bushel, ounce, pound, cubic inch; also 16 ounces = 1 pound, and 4 pecks = 1 bushel.

Areas of squares and oblongs and fractional parts of the same, areas not to exceed 20 sq. in., sq. ft. or sq. yds.

Measure perimeters of these square and oblong surfaces.

Processes.—Addition of any two numbers whose sum is less than 100.

Subtraction, with reduction, minuends less than 100.

Multiplication, products less than 100 and multiplier 2.

Short division, with reduction, dividend not to exceed 100 ıd divisor 2.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Same exercises for B class; also arm raising sideways and overhead. Walk- g exercises. "tip-toeing" should not be allowed; careful tention to carriage of body in walking.

See detailed course.

The Food:

1. Use of food.
2. Kinds of food—animal, vegetable and mineral.
3. Kinds of food used in cold, hot and temperate climates.
4. The stomach—illustrations from chart.

The Nails and Hair:

1. Care of these.

WRITING.—Practice-book No. 1; lead pencils.

Blackboard work and specimens same as Class B.

First two weeks of term use drill exercises; do but little ork upon letters. Get everybody ready for work. Review ›th alphabets in words and sentences. We are now getting ady for pens and ink, and very careful attention should be ven to *position*, *pencil holding*, and freedom of movement.

Allow no careless work at any time.

MUSIC.—Review the work of the preceding classes. A ;tle more advanced work upon the staff. Position of *do* in ;ys of C, D and G, recognized in modulation.

DRAWING.—The work of this class embraces the same ;neral features as that of Class B.

The type forms include the cone, square, pyramid, vase rm, and a review of the nine models already studied.

All drawings on board and paper large and bold

Special drill for pencil holding and free movement, with tracing in air and on board and paper.

Special attention to clay modeling, paper folding, stick laying, mounting surface forms, and drawing on paper, as directed in detailed course and "Use of Models."

B CLASS—THIRD GRADE.

LANGUAGE.—Daily work in copying sentences containing the new words of the spelling lesson; also in writing the sentences from dictation.

Teach the abbreviations, Mr., Mrs. and St.

Teach the children to write their own addresses; also the day of the week and its date.

Teach the use of *is* and *are*: also *was* and *were*.

How to write initials.

Material for oral language and written composition:

1. Form.
2. Geography—see detailed course.
3. History stories.
4. Reading lessons.
5. Poems.
6. Picture lessons.
7. Physiology.

Daily work in writing original statements and arranging the same in logical order. Develop carefully the thought of the reading lesson; have children express this thought orally in their own language, then write it in the form of a simple composition.

Carefully selected poems studied and then committed to memory.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

READING.—

Appleton's Second Reader, completed.

Barnes' Second Reader, completed.

Supplementary work:

Harper's Second Reader, Part II.

Normal Course Second Reader, completed.

Wayside and Seaside, No. 1, completed.

See detailed course in reading.

SPELLING.—Vocabulary—see spelling manual for this ade.

Define, spell orally and write in sentences from dictation words in grade vocabulary. See detailed course in reading.

NUMBERS.—Number work 30 to 60 inclusive, special attenon to multiples.

Notation.—Read and write numbers to 1000; Roman tation to 30.

Fractions.—$\frac{1}{12}$ and a review of all previous work. Reducon of mixed numbers to fractions; use no fraction whose nominator is larger than 12.

Compound Numbers.—60 minutes = 1 hour, 24 hours = 1 y, 365 days = 1 year; also the number of days in each month the year.

How to write dollars and cents, and the use of dollars and nts together in applied problems.

Teach linear rod.

Processes.—Addition of two or three numbers larger than 0 whose sum is less than 1000. Column addition of three ures.

Multiplication of numbers of one period, using 2, 3, 4, 5 d 6 as multipliers.

Subtraction with reduction, using numbers of one period only.

Short division with reduction, using 2, 3, 4, 5 and 6 as divisors.

Make statements for problems.

See detailed course.

GEOGRAPHY.—Structure—Relief of school district:

Place.—Semi-cardinal points. Maps of school room, floor and school yard, to scale.

Climate.—

(*a.*) Moisture :

1. Evaporation.
2. Productions—clouds, mists, fogs, rain, etc.

(*b.*) Heat—observe daily temperature ;

Position of sun :

1. During different parts of day.
2. During different parts of year.

Vegetation.—Soil, fertile and barren.

Uses of plants.

Trees of vicinity.

Animals.—Special study of camel and bears.

Minerals.—Special study of chalk and graphite.

People.—Elementary lessons on races represented in community.

Modes of Life.—Occupation ; ideas of city, town and state.

Government.—Lead children to knowledge of that which they can comprehend, about city government.

See detailed course in elementary geography.

PHYSICAL CULTURE AND PHYSIOLOGY.—Review work of second grade. Teach arm raising, with respiration combined ; also slight knee bending, toe raising, head and body bending.

See detailed course.

The Teeth :

1. Structure.
2. How injured.
3. Care of.

The Lungs :

1. Structure.
2. Care of.
3. Effect of exercise upon these organs.

Illustrations from chart.

WRITING.—Practice Book No. 1 ; pen and ink.

First two weeks of the term use drill exercises. Watch carefully the penholding. Show all how to take ink. Have them take up pens and lay them down often in order to get them accustomed to the new instrument.

Blackboard work and specimens same as second grade. Review both alphabets in words and sentences.

Spelling lessons and all writing previously done with lead pencil to be done with pen and ink.

MUSIC.—More difficult interval work; pupils to be able to tell readily the pitch, names and the position of each pitch on the staff.

Modulation in keys of C, G, D and F. More varieties of time.

DRAWING.—No. 1 Drawing Book for pupils, with Manual Part I, for teacher's use.

Special study of natural leaves, fruits and vegetables, and the drawing and modeling of the same.

Much supplementary work in bold and free drawing.

Books should show a careful record of term's instruction and a free expression characterized by broad gray lines.

A CLASS—THIRD GRADE.

LANGUAGE.—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the period as a mark of abbreviation, A. M., P. M., Av., P. O., cts., doz.

Teach tho use of capital letter in writing names of cities and streets.

How to write dates.

Simple use of quotation marks.

Simple form for a letter.

Common contractions, it's, can't, don't, etc.

Form of the possessive case of singular nouns in which the apostrophe preceeds the *s*.

Careful attention to language used by pupils in all recitations.

Daily work in oral and written composition. Have pupils reproduce orally the thought of the geography and reading lessons; also write the same in the form of a simple composition.

Work for complete statements and the logical arrangement of the same in this composition work.

Carefully selected poems studied and then committed to memory.

READING.—

Appleton's Third Reader, 25 lessons.

Barnes' Third Reader, 25 lessons.

Supplemental work:

Cats and Dogs, completed.

Fables and Folk Stories, completed.

See detailed course in reading.

SPELLING.—Vocabulary - See spelling manual for this grade.

Define, spell orally and write in sentences from dictation all words in grade vocabulary. See detailed course in reading.

Spell new words which occur in geography and number.

NUMBERS—Number work, 60 to 100 inclusive; special attention to multiples.

Notation.—Read and write numbers of two periods; Roman notation through to 100.

Fractions,—Continue work of preceding grades.

Teach reduction of improper fractions to whole or mixed numbers: use no fraction whose denominator is larger than 12.

Teach objectively addition, subtraction, multiplication and division of halves, thirds and fourths.

Compound Numbers.—Dollars and cents used together in applied problems.

Teach cubic foot and linear mile.

Percentage.—100%, 50% and 10% taught objectively; use both fractional and decimal forms.

Processes.—Addition of two or more numbers of two periods each; column addition of four figures.

Subtraction with reduction, using numbers of two periods.

Multiplication, multiplier containing two figures.

Short division completed.

Make statements for problems.

See detailed course.

Selections from Robinson's Beginners' Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY—Structure—Forms of land and water—island, continent, peninsula, isthmus, cape, lake, ocean, sea, gulf, bay, strait, harbor, plain, hill, valley, mountain, river-basin, river, spring, creek.

Detroit.—Map of city showing principal features,

Wayne County—Map to scale showing townships, learn townships bordering on Detroit.

State of Michigan—Parts, boundaries, surface. drainage, coastline, climate, vegetation, occupation of people, cities and railroads.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—In addition to exercises for B class, teach stepping exercise, alternate heel and toe raising, military salute and facings.

See detailed course.

The Teeth and food:

1. Structure of Teeth.
2. Kinds of teeth—incisor, canine and molar. Lead children to discover that the human body needs for its sustenance certain properties of various classes of food substances.
3. Importance of mastication.
4. Difference in structure of teeth herbiverous, carniverous and rodent animals.

Illustrations from chart.

WRITING.—Practice-book No. 1; pen and ink; copy-book No. 1.

First two weeks of term use drill exercise. Watch carefully all work done with pen. Do not require too much miscellaneous writing. Avoid working too slowly in practice books or too rapidly when doing other work, as writing spelling lessons. Write upper half on each page through copy-book by close of tenth week. Complete book nineteenth week.

Specimens at beginning of each month.

MUSIC.—In addition to the work of the preceding term, keys of C, G, D and E studied. Let the work be a developing process, and keep close relationship between lessons, each

being a step in advance of the last. Begin two part singing. The time should always be beaten steadily and the pupils know with which beat the commencing note of each phrase or section is to be sung.

DRAWING.—No. 2 Drawing Book for pupils and Manual Part I, for teacher's use.

Special attention to views and appearances of models, pattern making and drawing of natural forms. Careful attention to pencil holding and movement.

Drawings large and free.

Much supplementary work on black-board and paper should be required.

B CLASS—FOURTH GRADE.

LANGUAGE.—Hyde's Practical Lessons in English, lessons I to XXV inclusive.

Simple use of quotation marks.

Simple form for a letter.

Possessive forms of plural nouns ending in *s*.

Daily work in writing from dictation sentences containing the new words in spelling.

Careful attention to language used by pupils in all recitations, errors should be persistently corrected.

Daily work in written composition have pupils reproduce the thought of the geography, history and reading lessons.

Special attention to the logical arrangement of the sentences in this composition work.

READING.—

Appleton's Third Reader, lessons XXVI to LI.

Barnes' Third Reader, lessons XXVI to XLI.

Seven Little Sisters, completed.

Supplemental work:

Our World Reader No. 1, pp. 1-35.

Book of Tales, completed.

SPELLING.—See spelling manual for this grade.

Define, spell orally and write from dictation all words in grade vocabulary.

Special attention to the spelling of new words which occur in geography, number and drawing lessons.

NUMBERS.—Number work—Review all work in multiples and complete to 144. Daily work in oral applied problems.

Notation.—Read and write numbers through units of millions.

Fractions.—Develop terms numerator and denominator.

Teach objectively addition, subtraction, multiplication and division of halves, thirds and fourths and give written figure work for the same.

Compound Numbers.—Complete liquid measure. Teach cubic yard, also square rod. Review work of all preceding grades in compound numbers.

Percentage.—20%, 25% and 75%. Use both fractional and decimal forms.

Processes.—Continue addition and subtraction.

Multiplication, multiplier containing three figures and multiplicand containing not more than three figures.

Long division, divisors not to exceed 30.

Statements for problems.

See detailed course.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY.—

Earth as a whole:

1. Form.

2. Dimensions.
3. Measurements.
4. Daily and yearly motions.
5. Distribution of heat.
6. Winds.
7. Seasons.
8. Surface.

North America:

1. Location and boundaries.
2. Structure.
3. Drainage.
4. Outline.

See detailed course in geography for fourth grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Special attention position of body in sitting, standing and walking.

Review work of third grade and introduce varied shoulder ovements, leg, trunk and head exercises.

Walking and marching exercises as given in detailed urse.

The Blood :

1. The use of blood in conveying nourishment to the tissues.
2. Difference in color of pure and impure blood.
3. Effects of exercise and respiration upon the blood.
4. Treatment of injuries to the blood vessels.

Illustrations from charts.

WRITING.—Practice-book No. 2. Copy-book No. 2.

First two weeks of term use drill exercise. Write upper alf of each page, through copy-book by close of 10th week. omplete book by close of 19th week. Mark each page of opy-book when the page is finished. Write three pages in actice book to one in copy-book.

Specimens at beginning of each month.

MUSIC.—Review the work of the preceding classes. Try to select exercises and songs to illustrate previous drill in tune and time. On page four, boys and girls should alternate in reading and singing the exercises; afterwards individual pupils should be called upon to sing them.

DRAWING.—No. 3 Drawing Book for pupils, Prang's Complete Course Manual, Part II, for teacher's use.

Drill exercises in pencil holding and movement.

Continued attention to views and appearances.

Grouping of objects and drawing.

Units of design carefully explained.

Historic ornaments. Memory exercise.

Paper cutting and pasting of decorative forms.

A CLASS—FOURTH GRADE.

LANGUAGE.—Hyde's Practical Lessons in English, No. 1, Part I, completed.

Review work of preceding grade.

Possessive form, singular and plural nouns. Avoid special difficulties.

Daily work in writing from dictation sentences containing the new words in the spelling lesson.

Careful attention to language used by pupils in all recitations, errors should be persistently corrected.

Daily work in written composition, have pupils reproduce the thought of the history, reading and geography lessons.

Special attention to the logical arrangement of the sentences in this composition work.

In connection with the reading in history learn Longfellow's Paul Revere's Ride. Copy it, noticing that it is divided

into stanzas and that the first word of every line begins with a capital. Have pupils reproduce the thought of this poem in their own language in the form of a composition.

READING.—

Appleton's Third Reader, completed.

Barnes' Third Reader, completed.

Stories of American History, completed.

Supplemental work:

Our World Reader No. 1, pp. 205-254.

Scribner's Geographical Reader, North America.

SPELLING:—Vocabulary—see spelling manual for this grade.

Spell and define all words in grade vocabulary.

Special attention to the spelling of geographical terms, also other new words as they occur in any lesson.

NUMBERS.—Review multiple work. Daily oral work in applied problems.

Notation.—Read and write numbers of three periods.

Fractions.—Addition, subtraction, multiplication and division of all fractions through twelfths and written figure work for the same.

Compound Numbers.—Avoirdupois weight completed.

Teach reduction of compound numbers to a higher or lower denomination, and use all compound numbers taught in preceding grades in problems involving *one* reduction.

Percentage.—$16\frac{2}{3}\%$, $33\frac{1}{3}\%$ and $12\frac{1}{2}\%$. Use all rates previously taught.

Interest.—Simple interest, 6% time expressed in years.

Processes.—Addition, subtraction and multiplication continued.

Long division continued, divisors containing not more than three figures.

Teach simple form of bill.

Make statements for problems.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY.—Review B, fourth week.

North America:

1. Structure.
2. Drainage.
3. Outline.
4. Climate.
5. Distribution of Vegetation.
6. Distribution of Animals.
7. Distribution of Minerals.
8. People.
9. Political Divisions.

United States:

1. Location and boundaries.
2. Extent.
3. Advantages.
4. Population.
5. Education.
6. Religion.
7. Government.
8. History.

Special study of groups of states.

Special study of most important cities.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises same as for B class. Have pupils move with promptness and precision during exercises.

The Skin:

1. Structure and uses,

2. Uses of perspiration; effects if perspiratory glands are closed.
3. Effect of exercise upon the skin.
4. Hair and nails.
5. Bathing and care of skin.

The Clothing:

1. Value of cotton clothing; woolen.
2. Cleanliness and need of frequent changing.
3. Bad effects of tight clothing.

Illustrations from chart.

WRITING.—Practice-book No. 2; Copy-book No. 2 B.

First two weeks of term drill exercises. Write upper half of each page through copy-book by close of 10th week. Complete book by close of 19th week.

Copy-book through page 10 by close of tenth weeek.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

MUSIC.—In addition to the work of the preceding term, the division of the beat introduced. Class should practice all major scales. They should be able to sing chromatic scales.

DRAWING.—(Same as B Class, Fourth Grade.)

B CLASS—FIFTH GRADE.

LANGUAGE.—Hyde's Practical Lessons in English, No. 1, Part II, lessons I to XXV, inclusive. Review Part I.

Work in letter-writing continued.

Have pupils write the poem on page 80 from dictation, giving special attention to punctuation. Give other work of similar nature,

Careful attention to language used by pupils in all recitations; correct all mistakes.

Daily work in written reproduction of the thought of the reading, geography and history lessons.

In this written composition work, pay special attention to paragraphing.

READING.—

Scribner's Geographical Reader—South America.

Our World Reader, No. 1—South America.

Familiar Animals and their Wild Kindred, completed.

Hawthorne's Wonder Book, Part I.

Study of Hawthorne's Life.

SPELLING.—Careful attention to the spelling and meaning of new words in all lessons.

Reed's Word Lessons, lessons 1 to 52, inclusive. Special attention to the work in phonics and the diacritical markings of the letters, as given in these lessons.

ARITHMETIC.—Notation and numeration of numbers through three periods.

Addition, subtraction, multiplication and division with common proofs and names for terms.

Fractions.—Review all previous work.

Teach reduction to a common denominator, obtain common denominator by inspection.

Give abundant exercise in addition, subtraction, multiplication and division of fractions, having both like and unlike denominators through twentieths.

Compound Numbers.—Review tables of denominate numbers previously taught and use these compound numbers in applied problems. Teach reduction descending and ascending, no problem to contain more than three denominations.

Decimals.—Addition, subtraction, multiplication and division of decimals.

Give only simple problems. In division of decimals place the quotient above the dividend and make the divisor a whole number.

Percentage.—Use rates already given in applied problems in first case.

Interest.—Simple interest, time expressed in years.

Sample form of bill.

Make statements for problems.

Wentworth's Grammar School Arithmetic, pp. 1 to 75, inclusive.

GEOGRAPHY.—South America and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises in deep breathing; effects on the body and practical uses of deep breathing.

Teach combined movements of the body and the arms. Knee bending and all elementary exercises of Fourth Grade in review.

See detailed course.

Exercise:

1. Benefits and effects of.
2. Value of out-door sports.

The Heart:

1. Functions.
2. Veins, arteries and capillaries.

Illustrations from chart.

WRITING.—Practice-book No. 2. Copy-book No. 3.

First two weeks of term, movement drill exercises, using muscular movement, be sure that all get the free, easy use of the forearm.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Write three pages in practice-book to one in copy-book.

Mark each page of copy-book when the page is finished.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Pupils of this grade should understand the signatures of all the major keys. Pupils should be able to write correctly all scales. Test exercises, page 167, 168, 169. Second Music Reader, beating time; Time, names and singing. More varieties of time. Begin drill in steps and half-steps.

DRAWING.—No. 4 Drawing Book for pupils. Prang's Complete Course Manual, Part II, for teacher's use.

Careful and continued attention to the three subjects—Construction, Representation and Decoration, with better comprehension of principles and more careful execution.

Special and repeated drill in observing the appearances of rectangular objects and the representation of them.

Historic ornaments. Memory exercise.

Study of natural flowers for decorative purposes.

Paper cutting and pasting rosettes.

A CLASS—FIFTH GRADE.

LANGUAGE.—Hyde's Practical Lessons in English, completed and reviewed.

Letter-writing continued, special attention given to the body of the letter.

How to write a receipt for money; also a simple promissory note.

Work in writing poems from dictation continued.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

Daily work in written composition. Reproduce the substance of what has been read or taught In the other lessons.

Special attention to paragraphing in written composition work.

READING;—

Scribner's Geographical Reader—Europe.

Our World Reader, No. 1—Europe.

Eggleston's First Book in American History—completed.

Hawthorne's Tanglewood Tales.

Study of Hawthorne's Life.

SPELLING.—Careful attention to the spelling and meaning of all new words which occur in the regular lessons in other branches.

REED'S WORD LESSONS.—Review work of preceding grade and advance to lesson 85; special attention to phonics and diacritical marks.

ARITHMETIC.—Greatest Common Measure, Least Common Multiple and Cancellation. Wentworth's Grammar School Arithmetic, pp. 98 to 111. Omit exercise 67 until A Sixth.

Fractions.—All operations, denominators not to exceed 144.

Compound Numbers.—Continue the work of the preceding grade. Teach thoroughly the subtraction of dates to determine length of time.

Decimals.—Finish this subject, omitting all puzzling and difficult examples. Give abundant simple practice. Wentworth's Arithmetic, pp. 76 to 98.

Percentage.—Teach each case, using rates already mentioned. Use decimal form.

Interest.—Simple Interest, time expressed in years and months.

GEOGRAPHY.—Europe and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises same as for B Class. In marching, the movements should be made with reference to military precision, thus securing an erect and proud carriage of the body. See detailed course.

Special Senses:

1. Location and use.
2. Care of.

The Bones:

1. Structure and use.
2. Names of principal divisions of skeleton, number of bones in each division.
3. Different kinds of joints.

Illustrations from chart.

WRITING.—Practice-book No. 2. Copy-book No. 4.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week. Complete copy-book by close of nineteenth week.

Mark each page of copy-book when page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Same as Class B. Also, the class should be able to sing any piece in the Second Reader.

DRAWING.—No. 5 Drawing Book for pupils. Prang's Complete Course Manual, Part II, for teacher's use.

More careful execution, better understanding of principles required.

Views and appearances carefully understood,

Units of design for decorative purposes thoroughly considered.

Study of natural flowers for units of design.

Cutting and pasting of rosettes, on p. 18.

Historic ornaments. Memory exercise.

B CLASS—SIXTH GRADE.

LANGUAGE.—Kinds of sentences, and rules for the punctuation of each kind. Parts of a sentence, subject and predicate. Analysis of short, simple sentences.

Forms of names, how to write them, also how to abbreviate them.

Letter-writing continued. How to write a receipt for money; also a promissory note. Teach form and meaning of a check.

Use Reed and Kellogg's One Book Course in English, lessons 1 to 18 inclusive, in connection with topics studied.

Careful attention to language used by pupils in all recitations.

For Composition Work, have pupils reproduce in writing the substance of the lessons in Geography, History and Reading. Special attention to paragraphing.

The language period for at least two days in the week should be devoted to work in composition.

READING.—

Scribner's Geographical Reader—Asia.

Our World Reader, No. 1—Asia.

Living Creatures of Water, Land and Air—completed.

Hiawatha. Study of Longfellow's Life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons.

Use dictionaries, and teach pupils to find meaning and pronunciation of words.

Reed's Word Lessons, lessons 85 to 116 inclusive.

ARITHMETIC.—Common Fractions.

Review carefully all previous work, and finish the subject of Common Fractions. Wentworth's Grammar School Arithmetic, pp. 111 to 147.

Compound Numbers.—Review the table of Denominate Numbers, also reduction, ascending and descending, and use these in applied problems involving two reductions.

Decimals.—Thorough review of work of preceding grade.

Percentage.—Finish Percentage (without its varied applications), thorough drill in applied problems, use all four cases. Use decimal form for rates.

Interest.—Simple Interest, time expressed in years, months and days. Simple problems.

GEOGRAPHY.—Asia and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises as given in detailed course. Aim at quality rather than quantity in the regular daily drill. Caution pupils before beginning exercises against errors in the execution of the movements. Jerking and unnecessary twisting of the body should be

avoided. Muscles should be under such control that directions will be carried out easily and effectively.

Digestion of food:

1. Appearance of stomach before digestion, also during digestion.
2. Circumstances which affect digestion.
3. Kinds of food and value of a mixed diet.
4. Effects of alcohol on the stomach.
5. Effects of tobacco on the stomach.
6. Waste and repair of the tissues.

Illustrations from chart.

WRITING.—Practice-book No. 3. Copy-book No. 5.

First two weeks of term, muscular movement exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—This class should begin third series of charts. They should be taught to know the intervals to the extent of major and minor seconds and thirds, perfect and augmented fourths and perfect and diminished fifths. Difficult modulation. Gradually introduce all varieties of time.

DRAWING:—(Same as A Class, Fifth Grade).

A CLASS—SIXTH GRADE.

LANGUAGE.—Agreement of subject noun and predicate verb.

Teach common proof-marks, use these in indicating corrections in pupil's work.

Nouns and verbs having like pronounciation distinguished.

Modified subject and analysis of simple sentences containing modified subjects.

Definition, comparison, choice and arrangement of adjectives.

Modified predicate and analysis of simple sentences containing modified predicates.

Definition, comparison and use of adverbs.

Review of parts of speech.

Use Reed and Kellogg's One Book Course in English. Lessons 19 to 36 inclusive in connection with topics studied. Review B sixth work.

Have the pupils reproduce in writing the substance of the geography. history and reading lessons. Develop a whole chapter or topic in one composition.

The language period for at least two days in the week should be devoted to composition work.

READING.—

Scribner's Geographical Reader—Africa and Australia.

Our World Reader, No. 1—Africa and Australia.

Tompkinson's Life of Franklin.

Foster's Life of Abraham Lincoln.

Courtship of Miles Standish.

Study of Longfellow's Life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries and learn to find pronunciation and meaning of words.

Reed's Word Lessons, lessons 117-148 inclusive.

ARITHMETIC.—Common Fractions—Review and make a wide and varied application of fractions to practical business problems. Wentworth's Arithmetic, pp. 147 to 155. Selections from other authors.

Compound Numbers.—All operations. Wentworth's Arithmetic, pp. 155 to 171. Carpeting, papering and plastering.

Decimals.—Review, drill thoroughly on the figure work after the reasons are clearly understood.

Percentage.—Application to Profit and Loss. Use great variety of simple problems.

Interest.—Simple interest, time in years, months and days.

GEOGRAPHY.—Africa, Australia and Oceanica.

See detailed course for this grade. Review.

PHYSICAL CULTURE AND PHYSIOLOGY.—Continue movements of arms and feet. Body twisting and arm stretching. Review elementary exercises, aiming at promptness and grace in execution.

See detailed course.

The Brain :

1. Situation and use.
2. The nervous system ; likened to a telegraphic system of communication. The brain, the central office, from which radiate the lines or nerves that carry messages to and from all parts of the body, thus directing all movements of the muscles.

Illustrations from chart.

WRITING.—Practice-book No. 3, Copy-book No. 6.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page of copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—A, E, B, minor scales. Chromatic scale. Practice singing accidentals.

DRAWING.—No. 6 Drawing Book for pupils. Preliminary Manual for teacher's use.

Broader scope of work ; better understanding of principles and their application ; better execution and more independent work from pupils.

Views and appearances of rectangular objects at different angles.

Special attention to appearances. Thorough instruction and careful study must be given.

Historic ornaments. Memory exercise.

Decorative design. Borders.

Working drawings, figured.

B CLASS—SEVENTH GRADE.

LANGUAGE.—Phrase modifiers, analysis of simple sentences containing phrase modifiers. Arrangement and punctuation of phrases.

Compound subject and compound predicate ; connection, punctuation and agreement.

Use of preposition, conjunction and interjection.

Special work in business forms and business correspondence.

Use Reed and Kellogg's One Book Course in English Lessons, pp. 37 to 47 inclusive, in connection with topics

studied. Daily reproduction of substance of Geography, History and Reading lessons.

The language period for at least two days in the week should be devoted to work in compositions.

READING.—

Kellogg's First Book in Physiology and Hygiene.
Birds and Bees and Sharp Eyes.—Jno. Burroughs.
Snow Bound and Among the Hills.—Whittier.
Study Whittier's life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries. Reed's Word Lessons, lessons 149 to 180 inclusive.

ARITHMETIC.—Common Fractions.—Thorough review of the entire subject.

Compound Numbers.—Wentworth's Arithmetic, pp. 171 to 203. Connect the study of Longitude and Time with the review of Mathematical Geography.

Decimal Fractions.—Review.

Percentage.—Review Profit and Loss. Teach Commission and Brokerage, Insurance, Taxes and Duties. Wentworth's Arithmetic, pp. 203 to 225. Use simple problems.

Interest.—Simple Interest, completed. Wentworth's Arithmetic, pp. 225 to 233.

GEOGRAPHY.—Earth as a Whole.—Review.

1. Structure.
2. Drainage.
3. Outline.
4. Climate.
5. Vegetation.
6. Animals.
7. Minerals.
8. People.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises of preceding grade in different combinations, facings and turnings. See detailed course. Topic for essay: The Olympian Games.

Read Kellogg's First Book in Physiology and Hygiene. Each lesson in this subject should be preceded by a clear and thorough explanation, and followed by such questions and talks as will insure a full understanding of the subject matter by the pupils.

WRITING.—Practice-book No. 3. Copy-book No. 7.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Review Sixth Grade work, and take a little in advance. Pupils shall acquire one additional song in each major key.

DRAWING.—No. 7 Drawing Book for pupils. Preliminary Manual for teacher's use.

Work in both free-hand and instrumental.

Instrumental and free-hand drawing *must* be kept entirely *distinct*.

Constant drill on free curved movement.

Draw table line when appearance of object is given. Blackboard drawing.

Teach and practice carefully measuring by pencil in space.

No instrumental work except in construction.

Representation *must* be free-hand. Independent work required.

Representation.—Appearance of form. Picture drawing.

Effect of position and distance.

Objects must not be moved while drawings are being made. Pupils must keep their same position and look persistently in one direction until the exercise is finished.

Pupils *must* understand the principle and methods given in Manual, pages 28 and 29.

Handle cube and square prism above as well as below the eye.

Models must be made for pupils to study from.

Observation of models by the class as a unit, cannot be practiced according to stated conditions with only one model in the hands of the teacher.

Level of the eye, convergence of receding edges, foreshortening of surfaces when viewed obliquely, must be carefully studied.

Decoration.—Study of bi-lateral units adapted to surface designs. Application of units to borders.

Historic ornaments, Greek, Moorish and Gothic styles. Connect some story of history or myth of literature with the drawing.

Teach the derivation of the ornament, and how used.

Pupils should be required once a week to make or cut in any material, as paper, wood, clay, or plaster, the geometric forms and objects drawn in these books. Picture making or the study of plant forms may be alternated with cutting and making.

Collections of pupil's work in drawing and made-work should be called for each term.

A CLASS—SEVENTH GRADE.

LANGUAGE.—Object and attribute complements, analysis of simple sentences containing object and attribute complements.

Nominative and objective forms of pronouns, office of each.

Noun modifiers, possessive and explanatory.

Infinitives and participles, avoid difficult constructions.

Business correspondence, notes checks and receipts.

Notes of invitation, acceptances, regrets, etc.

Use Reed and Kellogg's One Book Course in English, lessons 48 to 60 inclusive, in connection with topics studied. Review previous courses.

Continue work in reproduction of history, geography and reading lessons. Aim for correct and rapid writing, limit the time; allow for this work in reproduction.

Work for logical development and clearness of statement in composition work. Devote at least two language periods each week to composition writing.

Review the topics as they are completed in the different studies by means of these written compositions.

READING.—

A History of the United States and its People.
—Eggleston.

Grandmother's Story of Bunker Hill and other Poem.
—Holmes.

Study of Holmes' Life.

Christmas Carol.—Dickens.

SPELLING—Careful attention to spelling and meaning of new words in all lessons. Have pupils make daily use of dictionaries.

Reed's Word Lessons, lessons 181 to 212 inclusive.

ARITHMETIC.—Practical problems involving a review of Common and Decimal Fractions and Compound Numbers.

Trade Discount.—Explain clearly the nature and purpose of Commercial Discount. Give abundant exercise in great variety of problems. Wentworth's Arithmetic, pp. 238 to 240. Use other authors.

Review Percentage, Profit and Loss, Commission and Brokerage, and Taxes and Duties.

Interest.—Teach Compound Interest and review Simple Interest. Omit Annual Interest. Wentworth's, pp. 243 to 246.

Simple Proportion.—Develop the principals of Simple Proportion. Finish the subject as presented in Wentworth's Arithmetic, pp. 254 to 260.

GEOGRAPHY.—Political geography.

See detailed course.

1. Political divisions.
2. Government.
3. Religion.
4. Occupations.
5. Commerce.
6. Special study of Michigan.
7. Review of United States.
8. Special study of Great Britain, Germany, Russia, France, Turkey, India, China, Japan, Egypt and Brazil.

PHYSICAL CULTURE —Review first series. Teach difference between Swedish and American military facings.

See detailed course

Topic for essay : The Education of the Spartan Youths.

WRITING.—Practice-book No. 13.

First two weeks of term, muscular movement drill exercises.

Miscellaneous writing. Notes, Receipts, Orders, Drafts, Checks, Business Letters, etc.

Specimens at the beginning of each month.

Give frequent tests of speed.

MUSIC.—Same as class B.

DRAWING.—(Same as B Class, Seventh Grade.)

B CLASS—EIGHTH GRADE.

LANGUAGE.—Teach the kinds of sentences ; simple, compound and complex ; also the different kinds of clauses.

Avoid involved constructions. Teach how to combine statements.

Classes of nouns, pronouns, verbs, adjectives, adverbs and conjunctions. Use Reed and Kellogg's One Book Course in English. Lessons 75 to 84 inclusive, in connection with topics studied. Review briefly previous course.

Continue business forms, special attention to form of draft.

Continue work in reproduction of lessons in History, Geography, Reading, etc.

Thought analysis of written compositions, take selections which are read, notice how the thoughts are grouped and arranged into paragraphs, find heads for paragraphs, make a synopsis of the whole composition.

Before writing an original composition construct a framework for the same, learn to develop a theme logically.

About half the language time should be given to this work in composition. Train pupils to express themselves clearly and rapidly in written language.

READING.—

Evangeline.—Longfellow.

Sketch Book.—Irving.

A study of Irving's life.

Reading of poems commemorating events in Revolutionary Period, connect reading with work in history.

Civics for Young Americans.—W. M. Giffin.

SPELLING.—Use dictionaries to find pronunciation and meaning of new words in all lessons.

Reed's Word Lessons, lessons 213 to 238 inclusive.

ARITHMETIC.—Bank Discounts.—Teach this subject thoroughly. Wentworth's Arithmetic, pp. 233 to 237. Omit True Discount. Partial Payments is of less importance, and less time may be devoted to this subject.

Trade Discount.—Review this subject thoroughly.

Stocks, Bonds and Exchange.—Wentworth's Arithmetic, pp. 247 to 254.

Interest.—Thorough review, drill on shortest methods of making calculations.

Proportion and Partnership. Wentworth's Arithmetic, pp. 254 to 266.

HISTORY AND GOVERNMENT.—

History and Government of the United States through the Revolutionary Period.

Barnes' Brief History and Government Manual.

PHYSICAL CULTURE.—Combine arm movements with body bendings. Teach stepping and swaying exercises.

See detailed course.

Importance of systematic exercise, effects of the same upon the brain.

Essay: Comparison and contrast of the education of Athenian and Spartan Youths.

WRITING.—Same as A. Seventh Grade.

MUSIC.—All major and minor scales understood. All difficulties in time understood at a glance. Three and four part singing. Drill in exercises still necessary.

Drawing.—No. 8 Drawing Book for pupils. Preliminary Manual for teacher's use.

A collection of work, consisting of drawings and made-work should be called for each term in this grade.

Construction.—Geometric views, working drawings, development of patterns, sections, problems in plane geometry, drawing to a scale.

Work both free-hand and instrumental.

Three dimensions expressed by two or more drawings.

Dotted lines for transferring measurements, dash lines for invisible edges, dot and dash lines for centre lines, and full lines for all outlines and visible edges.

Result lines in geometric work should be uniform, sharp black lines.

In instrumental drawing there should be no erasing, no piecing or patching of lines.

When pupils change from free-hand to instrumental work, teachers must see that the sharpening of pencils is changed to a wedge shape.

Representation.—Appearance of form, composition, foliage from nature, effect of position and distance, convergence of receding edges or lines, foreshortening of surfaces, the level of the eye considered. All work must be free-hand, and new

principles should be studied at black-board before drawing in books; graduation of lines to represent nearness and distance.

The three dimensions expressed in one drawing.

Pupils must be taught how to look at things.

Objects must not be moved while drawing.

Pupils must not change their position, but look persistently in one direction until the drawing is finished.

The principles of the perspective given on pages 28 and 29 of Manual, should be carefully developed.

Teach the terms horizon line, vanishing point. Edges must not coincide with each other, or with the table line. Continue to practice pencil measurement in space. Insist upon pupils sighting lengths and distances while drawing.

Frequent sketches of objects at home should be prepared by pupils.

Decoration.--Historic ornaments, Egyptian, Greek and Gothic styles; natural growth in plants for conventionalized units, modification of bi-lateral units by curves obtained from a study of nature, principles of decorative design, original arrangements.

Teachers must seek to make pupils conscious of the need of certain principles in good ornament in order to satisfy the eye.

In teaching historic ornament, awaken interest by relating, if possible, a story of history or myth of literature. Give the period of its use, and its location on map.

All good ornament possesses:

1. Order, which is produced by arrangement of parts.
2. Rhythm, which is produced by repetition of parts.
3. Symmetry, which is produced by balance of parts.
4. Proportion, which is produced by inequality of parts.

5. Contrast, which is produced by variety of parts.
6. Intricacy, which is produced by subtlety of parts.
7. Breadth, which is produced by union of parts.
8. Stability, which is produced by union of parts.
9. Repose, which is produced by harmony of parts.

There are three original styles in ornament, all others are only modifications of these:

1, Egyptian; 2, Greek; 3, Saracenic.

A CLASS—EIGHTH GRADE.

LANGUAGE. — Review capitalization and punctuation. Reed and Kellogg's One Book Course in English, lessons 122, 123 and 124.

Letter-writing reviewed and continued. One Book Course in English, pp. 286 to 292.

Modifications of the parts of speech. Reed and Kellogg's One Book Course, lessons 85, 88, 90, 91, 92, 93, 98, 101, 102, 103 and 107.

Business correspondence and business forms reviewed and continued; advertisements, telegrams, etc.

Review work of sixth, seventh and B eighth grades. Much of this work can be done in connection with the study of suitable selections, classify the words and phrases, notice their use, etc. Use the text book for reference rather than for recitation.

Special attention given to work in composition in this grade.

Continue thought analysis of chosen selections.

Connect the work in original composition with the review of topics in history, government and literature.

READING.—

The American Citizen.—Dole.

Tales from Shakespeare, by Charles and Mary Lamb.

Merchant of Venice.

SPELLING.—Use dictionaries to find meaning and pronunciation of new words in all lessons.

Reed's Word Lessons. Lessons 239, 240, 241, 246, 247, 248, 253, 254. 255, 258, 259, 260, 265, 266, 267, 270, 271, 272, 273, 276, 277, 278, 279, 280, 285, 286 and 287, with a review of all that is possible of work of previous classes.

ARITHMETIC.—Square Root, Wentworth's Arithmetic, pp. 266 to 270.

Mensuration, pp. 278 to 292.

Miscellaneous problems and general review of entire course.

HISTORY AND GOVERNMENT.—History and Covernment of the United States, completed. Barnes' Brief History.

PHYSICAL CULTURE.—Exercises of second series and review of all movements of preceding grade.

See detailed course.

Essay : Educational Advantages of American Young People.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

REPORT OF THE SECRETARY.

REPORT OF THE SECRETARY.

To the Board of Education :

GENTLEMEN :—In compliance with the requirements of the rules of the Board, I herewith submit a Financial Statement showing receipts and disbursements of money for the fiscal year ending June 30, 1892 ; a statement of amounts expended during the said period for the different schools and other purposes ; a recapitulation of the expenditures, and a schedule of public school property and its value on June 30, 1892 :

BUILDING FUND.

Receipts.

Bonds	$150,000 00	
Temporary loan from General Fund	5,825 96	
Interest on daily balances	2,293 30	
Taxes, 1890	809 68	
Warrant covered back	15 55	
Taxes, 1889	1 33	
		158,845 82

Disbursements.

Overdraft July 1st, 1891	$ 15,752 45	
Paid for new building	49,203 93	
Repaying of loans	16,825 32	
Paid for real estate	9,360 00	
Interest on overdraft	198 67	
		91,340 37
Balance June 30th, 1892		$ 67,605 45

REPAIR FUND.

Receipts.

Interest on daily balances	$ 471 92	
City taxes, 1890	354 18	
" " 1889	27	
Primary school money	4,046 00	
City taxes, 1891	30,589 08	
Miscellaneous sources	35 35	
		$ 35,496 80

Disbursements.

Overdraft, July 1st, 1891	$ 267 44	
Paid for interest on overdraft	27 40	
" " material	3,974 02	
" " labor	6,631 88	
Repaying note	5,971 98	
" loan to General Fund.	5,000 00	
		21,872 72
Balance June 30th, 1892		$ 13,624 08

SALARY FUND.

Receipts.

City taxes, 1891	$302,929 92	
Interest on daily balances	4,890 17	
Primary school money	92,582 19	
City taxes, 1890	3,932 48	
" " 1889	2 57	
Miscellaneous sources	95 00	
		$404,432 33

Disbursements.

Overdraft July 1st, 1891	$ 13,048 47
Interest on overdraft	97 84
Superintendent	3,999 96
Secretary	2,499 96
Supervisor	1,999 92
Teachers	359,372 63
Janitors	33,052 87

Sub. janitors	119 80	
Attorney	999 96	
Clerk in Superintendent's office	625 00	
" " Secretary's office	900 00	
" " Supervisor's office	666 59	
Repayment of note	9,253 02	
		426,636 02
Overdraft July 1st, 1892		$ 22,203 69

GENERAL FUND.

Receipts

From balance June 30th, 1891	$ 6,812 08	
Taxes for 1891	27,996 06	
From Primary School Fund	8,553 09	
" Repair Fund to repay loan	5,000 00	
" Building Fund to correct error	1,057 31	
" City taxes, 1890	449 45	
" Interest on daily balances	220 72	
" City taxes, 1889	38	
" Miscellaneous sources	634 92	
" Building Fund to repay loan	16,825 32	
		$ 67,549 33

Disbursements.

Paid for fuel	$ 18,908 57	
Temporary loan to Building Fund	16,855 15	
Paid for supplies	10,755 86	
" " miscellaneous	6,859 59	
" " furniture	3,832 73	
" " census	2,151 94	
" " printing and stationery	2,621 81	
" " rent	1,629 16	
" " interest on overdraft	9 65	
		$ 63,624 46
Balance July 1st, 1892		$ 3,924 87

BOOK OF REFERENCE AND APPARATUS FUND.

Balance July 1st, 1891	$ 268 07

Receipts.

Tuition fees	$ 1,373 42	
Interest on daily balances	25 41	
		1'398 83
		$ 1,666 90

Disbursements.

Supplies	$ 267 23	
Printing and stationery	150 35	
Apparatus	8 55	
Rebate of tuition	9 60	
		435 73
Balance June 30th, 1892		$ 1,231 17

SECRETARY'S CONTINGENT FUND.

Balance July 1st, 1891	$ 200 00
Disbursements	none
Balance June 30th, 18892	$ 200 00

EXPENDITURES BY SCHOOLS.

BAGLEY SCHOOL.

Teachers	$ 4,450 00
Janitor	420 00
Coal	248 36
Labor	109 58
Lumber	39 29
Wood	17 10
Water tax	12 00
Repairing roof	1 71
Blacksmithing	1 65
Expressing	1 00
Total	$ 5,300 69

BARSTOW SCHOOL.

Teachers	$10,295 00
Janitors	720 00
Coal	488 87
Labor	171 82
Lumber	48 25
Wood	32 83
Water tax	25 00
Kindling	19 50
Hardware	8 85
Dampers	4 84
Kindergarten chairs	4 00
Tuning piano	3 00
Expressing	2 00
Fittings	10
Total	$11,824 06

BELLEVUE SCHOOL.

Teacher	$ 2,075 00
Janitor	240 00
Wood	96 62
Labor	42 90
Water tax	6 00
Lumber	5 80
Kindling	4 50
Tin work	2 00
Expressing	1 60
Teaming	1 00
Total	$ 2,475 42

NEW BELLEVUE SCHOOL.

Teachers	$ 800 00
Janitor	150 00
Labor	89 85
Coal	51 50
Wood	22 30
Teaming	80
Total	$ 1,114 45

BELLEFONTAINE SCHOOL.

Teachers	$ 6,258 50
Janitors	647 58
Coal	259 47
Labor	139 69
Wood	27 00
Repairing roof	21 24
Water tax	20 00
Kindling	12 00
Expressing	5 30
Climbing pole	5 00
Office chair	4 50
Lumber	4 14
Fittings	35
Total	$ 7,404 77

BERRY SCHOOL.

D McLeod, for site	$ 6,150 00
H. Chandler & Co., for building	5,000 00
I. D. Smead & Co., " "	2,176 00
Labor	194 62
Fittings	6 97
Total	$13,527 59

BISHOP SCHOOL.

Teachers	$13,918 62
Janitor	1,187 11
Coal	940 13
Mason work	478 00
Labor	437 14
Lumber	99 82
Gas	82 80
Water tax	45 00
Shades	39 10
Repairing plaster	33 75
Wood	26 73
Kindling	11 00
Substitute janitor	10 00
Fittings	7 03
Tuition Rebate	4 80
Repairing boiler	3 20
Flue cleaner	3 00
Hardware	2 53
Expressing	1 60
Tar paper	1 50
Stove pipe	70
Wire	35
Total	$17,333 91

BROWNSON SCHOOL.

Teachers	$ 3,265 00
Janitor	420 00
Coal	228 65

Labor	38 23
Water tax	20 00
Wood	16 47
Kindling	7 50
Lumber	7 43
Total	$ 4,003 28

CAMPBELL SCHOOL.

Teachers	$ 3,905 00
Janitor	420 00
Labor	99 56
Wood	98 10
Lumber	22 97
Water tax	12 00
Kindergarten chairs	8 00
Expressing	2 60
Total	$ 4,568 23

CASS SCHOOL.

Teachers	$16,710 13
Janitor	1,500 00
Stone walk	426 72
Labor	405 96
Germicide	202 50
Repairing boiler	61 09
Coal	529 82
Lumber	37 44
Water tax	35 00
Wood	32 55
Fittings	13 64
Repairing roof	13 20
Kindling	11 00
Repairing plaster	10 75
Lawn Mower	7 25
Teaming	5 00
Hardware	4 95
Kindergarten chairs	4 0

ulding	1 88
cksmithing	1 25
pressing	1 05
ıket	35
ll paper	25
tings	20
Total	$20,015 98

CHANEY SCHOOL.

chers	$ 3,535 00
itor	420 00
l	228 52
or	46 18
ter tax	18 00
od	16 35
dling	9 00
nber	4 60
ings	1 40
Total	$ 4,274 00

CLAY SCHOOL.

chers	$ 5,576 37
itor	540 00
l	275 29
or	47 01
pairing Roof	31 88
ter tax	25 00
od	16 80
dling	12 00
nbing Pole	5 00
Total	$ 6,529 35

CLINTON SCHOOL.

chers	$ 5,445 00
itor	600 00
l	357 86
or	201 60

Repairing gutters	53 53
Wood	39 94
Water tax	16 00
Kindling	12 00
Tuning piano	11 25
Hose	6 13
Climbing pole	5 00
Fittings	2 77
Chloride of lime	1 41
Halyards	72
Hardware	45
Paint	38
Sand	25
Total	$ 6,754 29

CRAFT SCHOOL.

W. H. Holland & Sons, building addition	$ 5,047 48
A. Grant, building addition	2,660 30
Teachers	2,575 00
I. D. Smead & Co., heating apparatus	1 870 00
Paving Vinewood Ave	388 08
Labor	372 79
Janitor	306 00
Coal	104 41
Lumber	59 52
Wood	23 93
Hardware	10 62
Water tax	8 00
Expressing	1 80
Total	$13,428 13

CUSTER SCHOOL.

Teachers	$ 1,160 00
Janitor	165 00
Labor	60 98
Coal	51 50
Wood	42 60

Repairs	29 55
Water tax	8 00
Kindling	6 00
Tuning piano	1 50
Express	1 00
Total	$ 1,526 13

DICKINSON SCHOOL.

Teachers	$ 4,572 50
Janitors	540 00
Coal	332 80
Labor	49 71
Wood	17 25
Water tax	16 00
Cauldron	15 00
Teacher's desk	11 75
Climbing pole	10 00
Kindling	9 00
Kindergarten chairs	4 00
Tuning piano	2 00
Lumber	1 95
Expressing	80
Fittings	59
Total	$ 5,583 35

DUFFIELD SCHOOL

Teachers	$11,241 75
Janitor	810 00
Coal	601 39
Paving Macomb Street	436 12
Labor	351 44
Brick	71 50
Water tax	40 00
Wood	27 37
Lumber	22 10
Kindling	18 00
Sand, etc	13 09

FRANKLIN SCHOOL.

Teachers	$ 3,775 00
Janitor	420 00
Paving Pine Street	324 12
Coal	235 84
Labor	164 34
Wood	16 65
Water tax	12 00
Halyards	7 00
Lumber	5 70
Climbing pole	5 00
Paints	4 47
Kindergarten chairs	4 00
Tin work	1 50
Expressing	1 20
Total	$ 4,997 02

GARFIELD SCHOOL.

Teachers	$ 1,740 00
Janitor	306 00
Wood	109 01
Labor	69 43
Water tax	10 00
Lumber	6 59
Total	$ 2,241 03

GRATIOT SCHOOL.

Janitor	$ 45 00
Labor	20 13
Lumber	1 96
Teaming	50
Total	$ 67 59

HANCOCK SCHOOL.

W. H. Hollands & Sons	$ 6,553 30
Geo. Everson	4,276 40

Teachers	2,275 00
S. D. Smead & Co	1,934 53
Labor	430 57
Janitor	306 00
Coal	141 64
Inspector	72 00
Fittings	45 88
Wood	10 95
Kindling	9 00
Water tax	8 00
Repairing lock	50
Total	$16,063 77

HIGH SCHOOL.

Teachers	$34,278 00
Janitor	1,500 00
Coal	853 16
Labor	616 98
Electric light wiring	452 01
Science fund	392 86
Gas	303 01
Graduating exercises	218 72
Electric current	195 93
Repairing	132 32
Printing	131 40
Paper and stationery	123 38
Wood	54 76
Hardware	37 50
Lumber	30 05
Water tax	25 00
Shades	24 50
Flag	20 00
Kindling	16 00
Mason Work	14 57
Laundrying	12 00
Teaming	11 40
Cleaning carpets	6 10
Dusters	6 67

Climbing pole	5 00
Fittings	2 68
Book Binding	1 00
Blacksmithing	90
Freight	50
Total	$39,465 90

HOUGHTON SCHOOL.

Teachers	$ 9,025 00
Janitor	750 00
Coal	343 95
Labor	221 46
Water tax	25 00
Lumber	18 59
Gas	17 21
Kindling	12 00
Fittings	4 67
Express	2 90
Gasket	85
Hardware	23
Total	$10,421 36

HUBBARD SCHOOL.

Teachers	$ 4,425 00
Janitor	420 00
Coal	207 82
Labor	77 56
Lumber	25 56
Wood	23 95
Water tax	12 00
Kindling	9 00
Hardware	4 30
Expressing	1 00
Total	$ 5,206 09

IRVING SCHOOL.

Teachers	$10,387 50
Janitor	750 00

..	542 15
.....	211 03
:	30 66
.....	29 67
.....	25 00
.....	21 75
..	12 00
pole	5 00
;	2 10
.....	1 85
ano	1 50
.....	67
....	62
ning	55
.....	35
l	$12,022 40

JACKSON SCHOOL.

.....	$ 4,646 87
Hertz, Tallman Co., new building	3,732 05
Goodell, new building	1,355 60
ld & Co., new building	1,319 25
building	1,057 31
ller, new building	1,012 91
, new building	708 00
nell, new building	689 00
r building	557 49
.....	511 00
ald, new building	291 50
.....	289 28
.....	235 50
.....	163 93
new building	144 00
& Trumbly, new building	140 10
& Co., new building	103 16
building	78 00
.....	68 41

Hardware	36 85
Water tax	36 00
Curtains	29 29
Rubber Matting	27 74
Hose	12 65
Surveying	12 00
Kindling	7 50
W. Barrow	7 17
Expressing	5 95
Climbing Pole	5 00
Mason Work	2 42
Total	$17,285 83

JEFFERSON SCHOOL.

Teachers	$11,871 00
Janitors	810 00
Paving Selden Avenue	467 11
Coal	443 83
Labor	190 98
Wood	27 30
Water tax	25 00
Lumber	21 20
Kindling	12 00
Climbing pole	10 00
Tuning piano	4 50
Fittings	4 40
Stationery	2 50
Express	2 30
Repairing	85
Blacksmithing	25
Total	$13,893 22

JOHNSTON SCHOOL.

Teachers	$ 2,065 00
Janitor	306 00
Paving	226 92
Coal	130 19

Labor	47 76
Lumber	15 47
Wood	11 41
Water tax	8 00
Total	$ 2,810 75

LINCOLN SCHOOL.

Teachers	$ 4,529 25
Janitor	600 00
Coal	404 25
Labor	78 05
Water tax	25 00
Kindling	12 00
Wood	11 04
Lumber	8 06
Repairing	7 50
Fittings	5 79
Kindergarten chairs	4 00
Tuning piano	4 00
Expressing	70
Blacksmithing	35
Total	$ 5,689 99

LIVERNOIS SCHOOL.

Teachers	$ 1,335 00
Janitor	180 00
Labor	156 60
Wood	81 00
Repairing	28 50
Lumber	19 94
Expressing	10 60
Water tax	5 00
Climbing pole	5 00
Fittings	87
Total	$ 1,822 51

McKINSTRY SCHOOL.

Teachers	$ 3,463 00
Janitor	540 00
Coal	236 10
Labor	140.95
Wood	109 50
Lumber	46 99
Cleaning Vault	40 32
Fittings	26 86
Teacher's desk	24 00
Water tax	16 00
Repairing	6 90
Climbing pole	5 00
Teaming	3 30
Kindling	3 00
Castings	1 20
Hardware	75
Blacksmithing	25
Total	$ 4,664 12

MIAMI SCHOOL.

Teachers	$ 4,375 00
Janitor	780 00
Coal	208 23
Labor	156 68
Gas	85 80
Repairing	73 37
Water tax	50 00
Mason work	47 82
Telephone	42 00
Fixtures	29 49
Wood	21 93
Lumber	21 50
Laundry	18 00
Hardware	16 08
Kindling	13 50
Printing	12 00

ːe pipe	8 85
ts	6 50
ˈnery	5 25
tory	5 00
ːssing	3 10
Total	$ 6,052 10

NEWBERRY SCHOOL.

ˌers	$ 6,640 00
ɔr	720 00
	371 28
	101 37
	98 55
ˌers' desks	24 00
r tax	20 00
ːrgarten chairs	8 00
ˌg piano	3 00
ˈotal	$ 7,986 20

NICHOLS SCHOOL.

ˌers	$ 4,700 00
ɔr	420 00
	222 87
	76 89
	16 20
r tax	12 00
ing	9 00
gs	4 12
ˈotal	$ 5,461 08

NORVELL SCHOOL.

ˌers	$ 8,457 50
ɔr	770 00
	628 80
	226 64
ɔer	187 59
Assessment	107 22

Wood	25 09
Water tax	24 00
Kindling	12 00
Chairs	4 34
Hardware	3 60
Tuning piano	2 00
Sand	1 40
Express	1 00
Blacksmithing	50
Gaskets	35
Total	$10,452 03

JOHN OWEN SCHOOL.

Teachers	$ 5,400 00
Janitor	500 00
Coal	384 84
Labor	244 14
Lumbee	39 79
Water tax	16 00
Wood	21 75
Kindling	12 00
Repairing	5 00
Nails	1 70
Fittings	1 65
Tuning piano	1 50
Express	80
Total	$ 6,629 17

PALMER SCHOOL.

Teachers	$ 3,721 25
Schieble & Sheffuly, new building	1,485 70
Seats	1,073 20
Labor	558 65
Janitor	430 50
Jas. Cornell, new building	365 25
Paving Horton Avenue	371 00
S. D. Smead & Co., heating apparatus	330 00

Coal	301 84
W. H. Hollands, mason work	282 00
Lumber	171 90
Inspecting	144 00
A. Rohn & Co., ironwork	118 15
Bell	78 00
Calnon & Goodell, painting	67 00
Castings	49 48
Smith & McDonald, stonework	49 50
Detroit Cornice & Slate Co, roofing	44 40
Rubber matting	36 75
Curtains	34 04
Hardware	29 75
Water tax	25 00
Wood	16 48
Stone work	13 70
Hose	12 65
Fittings	10 94
Expressing	10 35
Kindling	9 00
Teaming	5 83
Kindergarten chairs	4 00
Total	$ 9,880 81

PITCHER SCHOOL.

Teachers	$ 8,800 37
Janitor	750 00
Coal	402 93
Labor	169 30
Water tax	24 00
Plumbing	18 50
Kindling	10 00
Repairing	9 90
Kindergarten chairs	8 00
Fittings	3 86
Lumber	3 00
Teaming	2 90
Total	$10,203 76

POTTER SCHOOL.

Teachers	$ 3,704 75
Janitor	420 00
Coal	208 77
Labor	34 16
Water tax	18 00
Wood	10 95
Kindling	7 50
Chairs	5 34
Climbing pole	5 00
Expressing	1 00
Total	$ 4,415 47

ROBERTS SCHOOL.

Teachers	$ 3,637 50
Janitor	540 00
Coal	274 70
Teacher's desk	24 00
Labor	23 26
Cauldron	15 00
Wood	11 03
Kindling	7 25
Kindergarten chairs	4 00
Total	$ 4,536 74

RUSSELL SCHOOL.

Teachers	$ 4,310 00
Janitor	540 00
Coal	269 45
Labor	104 07
Lumber	65 55
Wood	16 49
Water tax	16 00
Kindling	9 00
Express	1 00
Total	$ 5,331 56

TAPPAN SCHOOL.

Teachers	$11,033 14
Janitor	1,060 00
Paving	670 00
Coal	559 48
Labor	205 33
Opening Marantette St.	164 50
Water tax	35 00
Repairing	12 30
Hose	12 00
Kindling	12 00
Express	4 55
Kindergarten chairs	4 00
Lumber	3 30
Fittings	2 78
Hardware	2 55
Tuning piano	2 00
Cement	1 14
Flue Scraper	1 00
Total	$13,785 07

TILDEN SCHOOL.

Teachers	$ 8,563 00
Janitor	720 00
Coal	360 79
Labor	62 25
Bills incurred on account of fire	53 90
Water tax	25 00
Wood	16 35
Kindling	12 00
Chairs	4 95
Tuning piano	3 00
Express	1 80
Paint	1 10
Hardware	50
Oil	50
Total	$ 9,825 14

TRAINING SCHOOL.

Teachers	$ 4,635 00
Graduating exercises	23 97
Ribbon	8 28
Chairs	8 00
Castors	4 00
Expressing	1 93
Total	$ 4,681 18

TROWBRIDGE SCHOOL.

Teachers	$ 8,022 50
Janitor	720 00
Coal	391 99
Labor	65 02
Water tax	20 00
Wood	16 47
Teacher's desk	12 00
Kindling	10 75
Replacing halliards	5 00
Kindergarten chairs	4 00
Hardware	1 20
Teaming	1 20
Repairing	30
Total	$ 9,270 43

VAN DYKE SCHOOL.

Teachers	$ 6,446 25
Janitor	540 00
Coal	355 54
Labor	75 56
Wood	16 48
Water tax	16 00
Repairing	14 78
Lumber	11 63
Kindling	9 00
Expressing	6 80

Replacing halliards	5 00
Hardware	1 05
Total	$ 7,498 09

WASHINGTON SCHOOL.

Teachers	$ 9,760 00
Janitor	720 00
Coal	382 16
Labor	166 07
Lumber	72 08
Castings	32 00
Water tax	25 00
Wood	22 31
Repairing plaster	14 25
Replacing halliards	10 00
Hardware	9 90
Kindling	9 00
Copperas	6 00
Kindergarten chairs	4 00
Express	2 00
Tin work	1 60
Freight	1 55
Fittings	65
Total	$11,238 57

WEBSTER SCHOOL.

Teachers	$13,500 00
Janitor	1,200 00
Coal	467 58
Labor	363 79
Fittings	59 23
Plumbing	45 75
Water tax	36 00
Lumber	13 63
Kindling	6 00
Stationery	5 25
Kindergarten chairs	4 00

Carpet	3 50
Teaming	3 50
Expressing	3 20
Cement	1 86
Blacksmithing	1 75
Tuning piano	1 50
Sand	78
Halyards	35
Total	$15,717 67

WILKINS SCHOOL.

Teachers	$ 9,604 38
Janitor	720 00
Coal	350 28
Labor	84 49
Repairing	34 37
Water tax	25 00
Wood	21 75
Kindling	7 50
Chairs	4 67
Lumber	4 32
Total	$10,836 76

WILLIAMS SCHOOL.

Teachers	$ 4,510 37
J. B. Palmer, carpenter work	4,176 55
Seats	1,640 30
Calnon and Goodell, plastering	1,185 95
Labor	946 05
Jas. Cornell, painting and glazing	931 00
W. H Hollands & Sons, mason work	907 94
J. C. Cobb, stone work	625 57
Janitor	600 00
I. D. Smead & Co., heating apparatus	530 37
Coal	405 21
Lumber	251 27
Detroit Cornice & Slate Co., roofing	189 75

Inspecting	144 00
A. Rohns & Co., tin work	141 67
Fittings	122 07
Teaming	83 50
Bell	78 00
Curtains	57 00
Arbitrator	50 00
Castings	49 94
Hardware	48 95
Plumbing	39 30
Rubber matting	27 74
Water tax	24 00
Wood	21 93
Hose	12 65
Kindling	9 00
Express	7 70
Paint	4 95
Kindergarten chairs	4 00
Cement	60
Blacksmithing	50
Total	$17,827 83

FOR A NEW SCHOOL CORNER OF MERRICK AVE. AND 27TH. STREET.

Paid for site	$ 3,200 00
" " recording deed	75
Total	$ 3,200 75

BELLEFOUNTAINE NIGHT SCHOOL.

Janitor	$ 78 00
Teachers	228 00
Oil	5 52
Total	$ 311 52

DUFFIELD NIGHT SCHOOL.

Teachers	$ 1 124 00
Janitor	162 00
Oil	29 39

Books	21 55
Lamps	12 15
Expressing	40
Total	$ 1,349 49

HIGH NIGHT SCHOOL.

Teachers	$ 2,016 50
Gas	224 09
Janitor	202 50
Book-keeping blanks	27 00
Piano rent	2 50
Total	$ 2,472 59

NEWBERRY NIGHT SCHOOL.

Teachers	$ 289 25
Janitor	78 00
Oil	6 30
Total	$ 373 55

NORVELL NIGHT SCHOOL.

Teachers	$ 1,344 50
Janitor	162 00
Oil	24 98
Books	10 00
Expressing	40
Total	$ 1,541 88

PITCHER NIGHT SCHOOL.

Teachers	$ 1,283 25
Janitor	162 00
Books	54 73
Oil	20 80
Total	$ 1,520 78

TROWBRIDGE NIGHT SCHOOL.

Teachers	$ 1,010 25
Janitor	162 00

....	21 24
mps	12 00
oks	11 30
Total	$ 1,216 79

VAN DYKE NIGHT SCHOOL.

achers	$ 408 00
nitor	138 00
.....	12 63
oks	1 60
Total	$ 560 23

WEBSTER NIGHT SCHOOL.

achers	$ 810 75
nitor	162 00
....	17 36
mps	12 00
ok-keeping blanks	11 80
oks	3 20
Total	$ 1,017 11

OFFICERS OF THE BOARD.

perintendent	$ 4,000 00
:retary	2,500 00
pervisor	2,000 00
torney	1,000 00
Total	$ 9,500 00

GENERAL OFFICE EXPENSES.

nt	$ 1,629 16
nitor	300 00
:ctric lighting	14 35
pressing	11 71
... .	9 52
ine	2 25
undrying	1 75
sters	1 50

Paper	1 00
Putting up awning	75
Total	$ 1,971 99

SUPERINTENDENT'S OFFICE.

M. E. Coffin	$ 1,800 00
N. B. Seitz	525 00
B. Reilly	50 00
Telephone	30 00
Book case	20 00
Mimeograph	13 50
Directory	5 00
Labor	2 95
Hardware	30
Total	$ 2,446 75

SECRETARY'S OFFICE.

H. S. Reeves	$ 825 00
W. T. Grogan	527 00
Safe	75 00
Stationery	35 00
Telephone	30 00
Type Writer's desk	30 00
Water set	7 63
Order book	7 50
Directory	5 00
Repairing stamp	5 00
E. H. Knapp	4 00
Hardware	3 36
Glass	2 53
Labor	36
Total	$ 1,557 38

SUPERVISOR'S OFFICE.

E. H. Knapp	$ 580 09
J. W. Hanrahan	82 50
Telephone	30 00

Coal	20 28
Labor	14 27
Printing	9 20
Stationery	8 02
Steel tape	7 50
Memorandum books	5 25
Hardware	2 81
Lumber	48
Total	$ 760 40

STORE ROOM.

Labor	$ 1,248 82
Brushes	469 50
Supplies	380 42
Hardware	123 01
Oil	78 76
Remnants	65 55
Halyards	63 24
Nigrosine	60 00
Paint	48 00
Cotton	46 51
Brooms	44 00
Dusters	38 00
Crayon	36 00
Thermometers	36 00
Gold dust	33 00
Soap	31 80
Mop Swabs	28 84
Baskets	27 00
Cord	23 01
Brimstone	12 66
Toilet paper	11 00
Dust pans	10 40
Lamp wicks	10 05
Rubber matting	9 50
Lumber	8 25
Cups	7 50

Clay	6 50
Matches	6 40
Couplings	6 08
Chair bottoms	5 29
Glass	4 16
Kindergarten chairs	4 00
Stove polish	3 00
Express	2 80
Rattans	2 50
Repairs	1 75
Blacksmithing	3 18
Barrel	1 50
Freight	1 21
Total	$ 2,999 19

SHOP.

Labor	$ 1,581 25
Lumber	478 03
Slating	375 00
Paint	296 61
Seats	231 75
Hardware	143 07
Alabastine	96 00
Castings	52 15
Rubber matting	50 73
Express	31 60
Telephone	30 00
Oil	20 84
Wrenches	12 43
Fittings	8 45
Teaming	6 75
Water tax	5 00
Coal	4 43
Blacksmithing	3 95
Gasoline	50
	$3,428 54

MISCELLANEOUS.

Stationery	$ 3,214 12
Printing	1,841 59
Books	1,003 10
Advertising	291 30
Livery	185 75
Arithmetics	144 00
Models	130 24
Labor	111 91
Envelopes	101 90
B. R. Hayes	100 00
E. H. Knapp	82 00
H. L. Reeves	75 00
Music	71 69
Seats	68 72
Maps	67 00
Check books	31 50
Saginaw trip	31 20
Teaming	33 27
Anemometer	28 25
Kindergarten supplies	25 22
Compiling census	25 00
W. E. Baubie	23 00
Tin work	18 12
Express	17 44
Lansing trip (free text books)	16 00
Slate rulers	12 58
Freight	12 50
F. R. Wilson	10 00
Bookbinding	8 70
Shoe pegs	7 85
Clay	6 50
Picture cord	5 00
Plumber's license	5 00
Oil	3 75
Gaskets	3 68
Sawdust	2 50
Stamps	2 37
Telephoning	75
Car tickets	35
Total	$ 7,818 85

RECAPITULATION.

Bagley	$ 5,300 69
Barstow	11,824 06
Bellevue, No. 1	2,475 42
Bellevue, No 2	1,114 45
Bellefontaine	7,407 77
Berry	13,527 59
Bishop	17,333 91
Brownson	4,003 28
Campbell	4,568 23
Cass	20,015 98
Chaney	4,274 00
Clay	6,529 35
Clinton	6,754 29
Craft	13,428 13
Custer	1,526 13
Dickinson	5,583 35
Duffield	13,637 16
Everett	10,142 71
Farrand	5,361 63
Ferry	5,351 82
Firnane	4,893 54
Franklin	4,997 02
Garfield	2,241 03
Gratiot, (old)	6,7 59
Hancock	16,063 77
High	39,465 90
Houghton	10,421 36
Hubbard	5,206 09
Irving	12,022 40
Jackson	17,265 93
Jefferson	13,892 33
Johnston	2,810 75
Lincoln	5,689 99
Livernois	1,822 51
McKinstry	4,064 12
Miami Ave	6,052 10
Newberry	7,986 20
Nichols	5,461 08
Norvell	10,452 03
Jno. Owen	6,029 17
Palmer	9,880 81
Pitcher	10,302 76
Porter	4,415 47
Roberts	4,536 74
Russell	5,331 56
Tappan	13,785 07
Tilden	9,825 14
Training	4,681 18
Trowbridge	9,270 43
Van Dyke	7,498 09
Washington	11,238 57

r	15,717 67
l	10,856 76
ıs	17,827 83
: Ave	3,200 75
ıtaine Night School	311 52
Night School	1349 49
ight School	2472 59
ry Night School	373 55
Night School	1541 88
Night School	1520 78
idge Night School	1216 79
ke Night School	560 23
: Night School	1017 11
of the Board	9500 00
Office Expenses	1971 99
tendent's Office	2446 75
ry's Office	1357 38
sor's Office	760 40
oom	2999 19
	3128 54
ıneous	7818 85
tal	$517,398 62

SCHEDULE OF PUBLIC SCHOOL PROPERTY.

NAME OF SCHOOL.	No. of Rooms	Sittings.	Value of Lot.	Cost of Building.	Total.
Bagley	6	336	$3,700	$15,000	$18,700
Barstow	12	617	8,580	30,000	38,580
Bellefontaine	10	520	4,250	25,000	29,250
Bellevue	3	163	3,100	2,500	5,600
Bellevue New	1	75	2,400	1,500	3,900
Berry	12	600	6,150	32,000	38,150
Bishop	21	1,237	11,300	56,000	67,300
Brownson	6	307	6,000	18,000	24,000
Campbell	6	306	5,500	6,000	11,500
Cass	22	1,070	57,000	45,000	102,000
Chaney	6	331	3,000	18,000	21,000
Clay	8	413	10,000	25,000	35,000
Clinton	8	455	5,840	18,000	23,840
Cottage Grove	1	35	Leased	300	300
Craft	8	400	3,550	20,000	23,550
Custer	2	125	1,000	3,000	4,000
Dickinson	8	432	4,500	25,000	29,500
Duffield	17	954	15,500	45,000	60,500
Everett	12	656	6,000	25,000	31,000
Farrand	6	343	5,700	18,000	23,700
Ferry	8	391	5,000	18,000	23,000
Firmane	6	353	3,950	12,000	15,950
Franklin	6	346	6,400	4,000	10,400
Gratiot	1	68	1,500	1,500	3,000
Gratiot Discontinued			10,000		10,000
Garfield	4	207	6,300	4,000	10,300
Hancock	12	576	7,500	30,000	37,500
Hibbard	3	204	2,000	1,000	3,000
Hickey	4	196	3,000	4,000	7,000
High	25	1,000	198,500	100,000	298,500
Houghton	12	582	7,500	20,000	27,500
Hubbard	8	391	5,000	18,000	23,000
Irving	12	687	18,750	35,000	53,750
Jackson	8	415	15,000	18,000	33,000
Jackson Discontinued			5,000		5,000
Jefferson	17	881	9,200	45,000	54,200
Johnston	4	222	3,000	10,000	13,000
Lincoln	8	419	7,350	24,000	31,350
Livernois	2	117	1,650	2,000	3,650
McKinstry	8	435	3,000	12,000	15,000
Merrick Ave	Not Completed		3,200	14,000	17,200
Miami	10	500	20,350	25,000	45,350
Newberry	12	658	4,000	30,000	34,000
Nichols	8	393	6,350	10,000	16,350
Norvell	12	640	5,700	30,000	35,700
Oakland	1	54	800	200	1,000
Owen, John	8	449	6,300	18,000	24,300
Palmer	8	397	6,000	18,000	24,000
Pitcher	12	668	4,000	30,000	34,000
Potter	8	394	3,000	18,000	21,000
Roberts	8	390	5,000	25,000	30,000
Rose, M. M.	1	70	3,000	1,500	4,500
Russell	8	433	Leased	25,000	25,000
Tappan	12	574	7,000	30,000	37,000
Tilden	12	725	7,450	30,000	37,450
Trowbridge	12	630	11,400	30,000	41,400
Van Dyke	8	462	7,500	25,000	32,500
Washington	12	631	8,780	25,000	33,780
Webster	12	1,004	6,000	45,000	51,000
Wilkins	12	610	7,200	25,000	32,200
Williams	12	611	4,000	34,000	38,000
Workshop			1,200	1,500	2,700
Totals	718	22,720	621,300	1,277,800	1,899,100

Respectfully submitted,

DAVID WALLACE, Secretary.

FIFTIETH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT

FOR THE

YEAR ENDING JUNE 30, 1893.



FIFTIETH ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1893.

—

DETROIT:
THOS. SMITH PRINTING COMPANY, PRINTERS.
1893.

THE NEW YORK
PUBLIC LIBRARY
12428
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

BOARD OF EDUCATION

OF THE

City of Detroit.

Office: Hodges' Building, Cor. State and Griswold Sts.

NAME.	Address.	Term expires
COFFIN, PHILLIP M.	Whitney Block	June 30, 1895
McDONALD, C. SHELDON	Moffat Block	" " "
LICHTENBERG, JULIUS	730 Antoine street	" " "
PARSONS, MRS. S. C. O.	560 Fourth avenue	" " "
RATHMANN, WM. G.	221 Division street	" " "
WALSH, JOSEPH	333 Sixth street	" " "
TODENBIER, JOHN B.	People's Savings Bank	" " "
CAMPBELL, JAMES	184 Twelfth street	" " "
VOIGT, WM. Jr.	142 Sherman street	June 30, 1893
STUART, JOHNSON	742 River street	" " "
LINGEMANN, FRANK X	Champlain street	" " "
FERGUSON, DAVID	67 Foundry street	" " "
BERRY, THOMAS	1100 Jefferson avenue	" " "
CREBBIN, FRED.	558 Vinewood avenue	" " "
ADAIR, WILLIAM	825 Fort street east	" " "
HARGREAVES, SAMUEL, Jr.	376 Morrell street	" " "

OFFICE HOURS.

Secretary.....9 A. M. to 5 P. M
Superintendent.....4 to 5 P. M
Supervisor.....11 A. M. to 12 M

OFFICERS FOR 1892-93.

WM. ADAIR.....PRESIDENT.
DAVID FERGUSON.....PRESIDENT PRO TEM.
DAVID WALLACE.....SECRETARY.
JOHN S. SCHMITTDIEL.....TREASURER.
WM. E. ROBINSON.....SUPT OF SCHOOLS.
ERNEST NUPPENAU.....SUPERVISOR OF PROPERTY.
WM. E. BAUBIE.....ATTORNEY.

STANDING COMMITTEES FOR 1892-93.

JUDICIARY—Inspectors McDonald, Todenbier and Crebbin.

TEACHERS AND SCHOOLS—Inspectors Coffin, Stuart, Walsh, Campbell and Voigt.

TEXT BOOKS AND COURSE OF STUDY—Inspectors Campbell, Lingemann, Hargreaves, Ferguson and Berry.

FINANCE—Inspectors Todenbier, Hargreaves and Licatenberg.

REAL ESTATE AND SCHOOL BUILDINGS—Inspectors Voigt, Lingemann, Ferguson, Walsh and Berry.

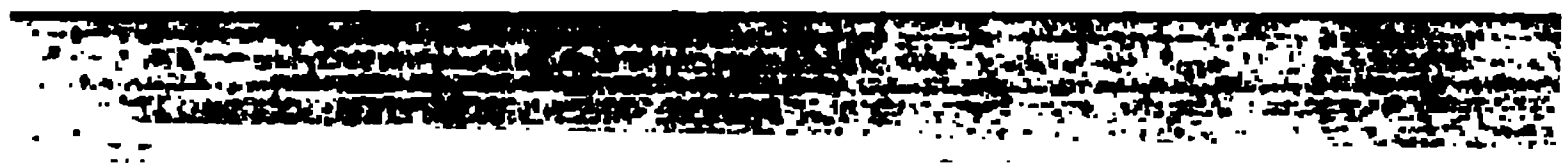
JANITORS AND SUPPLIES—Inspectors Stuart, Ferguson, Walsh, Berry and Coffin.

HEALTH AND VENTILATION—Inspectors, Campbell, Rathmann and Lingemann.

RULES—Inspectors Walsh, Stuart and Parsons.



❋ REPORT OF THE PRESIDENT. ❋



REPORT OF THE PRESIDENT.

To the Board of Education:

In accordance with an established custom, I have the honor to submit to you a brief review of the matters which have engaged our time and attention for the past year, and to offer such remarks and suggestions concerning the affairs of our schools as seems to me to be pertinent thereto or of possible benefit to our successors in their management of affairs.

The year has been a marked one in the history of the Schools by reason of many things of unusual importance which have occurred within it, among these being the introduction of free text books, the destruction of the old High School building by fire, and the act of the Legislature giving the Mayor of the city the power to pass upon the acts of the Board and veto such as failed to meet his approval.

The report of our Superintendent shows that there has been a steady and satisfactory growth along the whole line of school work, and it is due to him and the corps of workers under him to say that their faithful and untiring efforts have been productive of fruitful results in the form of good work which is giving our city recognition as a city with superior public school advantages.

The Revised Course of Study adopted a year ago has been in effect, and is meeting with great favor. Other school authorities in the revision of their own courses have received and acknowledged help therefrom. The work as now outlined is more closely connected in the different grades and each subject more nearly related to the others: the interest on the part of the pupils has been greater because of this more logical connection in the work, and the general results more satisfactory because of the better order in work prescribed. There has been a marked improvement in the Language Work because of the greater attention given to the speaking and writing of good English. This is gratifying because of the practical use and value of such power.

A most important event of the year and in the history of the Schools was the introduction of the free text books at the beginning of the school year in September, 1892. The measure has been an expensive one, the cost for this year being $28,201.45, but the increased attendance and the benefits derived from the broadening of the course of study and the economy in time more than compensate for the expense. Free books have been furnished only to pupils in the primary and grammar grades, and only to such of those as required new books, pupils who were already provided with books of their own being required to continue using them, and in this way the cost of books has been kept to the minimum.

The Normal Training School has done excellent work during the year; but the attendance during the last term was smaller than usual. Those who are most deeply interested in the school claim that it can never accomplish its full purpose until it is housed in a larger building planned with special regard to its needs and fully equipped

with all necessary books and appliances for carrying on its work. Such a building and its equipment will be expensive, but if found to be necessary there should be no hesitation in submitting the necessary estimate and urging its allowance.

The High School has done its usual strong and thorough work this year. The burning of its building in January and the consequent removal of the school to the Biddle House occasioned some loss of time, but not so much as might have been expected under the circumstances. Everything possible should be done to hasten the completion of the new High School building, as it is a much needed structure.

The Night Schools maintained during the year were well attended, and much good work was done in them. These schools afford an opportunity to large numbers who cannot attend day sessions, and everything necessary should be done to make their work thorough and efficient.

In my opinion a Manual Training School, in connection with our High School, will be a most valuable addition to our school system, and it is much to be regretted that a more cordial reception was not given to a number of our most prominent citizens who, with great liberality, offered to give about one hundred thousand dollars in money and land for the establishment of such a school provided certain reasonable and fair conditions which they named were agreed to; but several of the few members who met with the gentlemen referred to were indifferent or antagonistic, and the offer came to naught. Had a different disposition been manifested there is little doubt but that the establishment of the school could have been made certain in the near future. It should need no argument to show the benefits to be derived from the acceptance of such

an offer, and I hope that our successors will not fail to re open the negotiations with the gentlemen who made it. A very small percentage of those who enter the High School do so with the intention of entering the learned professions, and to the great majority who leave the school to become "bread-winners" the knowledge gained in a Manual Training School would be of great practical benefit. I most earnestly hope that the offer will be renewed and accepted and that a Manual Training School will soon be added to our system of education.

The greatest needs of the present time are a new Central High School, an Eastern and a Western High School, and new school buildings to relieve the crowded condition of the schools in the outlying portions of the city, nearly all of which are filled and unable to accommodate many who apply for admission. The need of the High Schools has long been recognized and urged, and now the need of schools to relieve the Bellefontaine and Webster in the west, the Irving and Tilden in the north, and the Brownson, Johnson, Norvell and Van Dyke in the east is equally urgent and imperative. In the spring of 1892 estimates for a number of these schools were submitted to and allowed by the Common Council and Board of Estimates, and in the spring of 1893 estimates for additional schools required were submitted to and approved by the same bodies, but so far not one dollar of the four hundred and fifty thousand dollars appropriated for new schools and sites had been furnished to the Board, and it has been impossible to make even a beginning on the much needed structure.

In August of 1892 the condition of the money market was easy, and bonds, by which the money is to be raised, could have been sold to good advantage, but they were not advertised for sale until December, 1892, and at that time

money was scarce and the premium offered was so small that the bids were rejected. Since then it has not been possible to dispose of the bonds upon favorable terms, and it is impossible to foresee the time when they will be saleable. The result is that the erection of schools which are needed to-day will be delayed for at least a year, and not one of them can possibly be finished before September, 1894. This is a condition of affairs for which this Board is in nowise to blame, but which is entirely due to the failure of certain officers of the city to perform their duty in the matter of selling the bonds at the proper time.

It is very necessary that larger and more convenient quarters be provided for the Board and its offices. The room in which Board meetings are held is barely large enough to accommodate the members and the representatives of the press, leaving only standing room, and not much of that, for many citizens of both sexes who are so much interested in school matters as to attend the meetings; and the rooms occupied as offices are neither large enough nor capable of proper arrangement to accommodate the greatly increased and steadily increasing volume of business. Steps should be taken at once to provide the more suitable quarters needed.

On July 1, 1892, certain portions of Greenfield, Highland Park and Hamtramck, lying to the north and east of the city, and which had recently been annexed to it, came under the control of the Board. The added territory contained a school population of 1,283 according to the census of 1892, and in the settlement with the various districts we acquired title to four small school buildings (two of brick and two of wood) and the ground on which they stood, one small frame building on leased land and $2,880.90 in cash. The total seating capacity of the

schools was 433, and the buildings and grounds were valued at $11,050.

The result of the census enumeration for several years past has been very unsatisfactory, and in order that the census may be accurate I would suggest that the work be given to R. L. Polk & Co., that firm having experienced men in its service and being willing to do the work for a reasonable price.

By an act of the Legislature, approved May 23, 1893, it was made the duty of our Secretary to submit the proceedings of the Board to the Mayor of the city for approval. Deeming the act to be of doubtful constitutionality, and believing it to be unwise to place the veto power in the hands of an officer who did not attend the meetings of the Board often enough to be familiar with its business and whose attitude seemed to be that of hostility to its members, the Secretary was instructed to refuse to comply with the requirements of the act, and the Mayor applied for and obtained from the Circuit Court a temporary order restraining the Board from entering into any contract or paying out moneys until the hearing and determination of a motion for an injunction. The hearing is to be given early in July, but meanwhile proposed works of repair and improvement are at a standstill, and the delay may prevent them from being made until next year.

During the past year one new twelve-room school building (the Berry) has been completed and occupied; a twelve-room building (the Columbian) has been under construction; an addition of four rooms has been made to the Jefferson; an addition of four rooms made to the Duffield, and repairs and improvements more or less extensive made to other buildings in need of them.

It is admitted that the sanitary condition of some of

our older buildings is not what it should be, but it is most emphatically denied that any one of them is in a condition dangerous to health, although certain incompetent persons under the Board of Health have declared them to be so.

During the past year a number of the old buildings have been provided with improved heating and ventilating apparatus and automatic flushing water closets, and it is the intention of the Board to improve the remainder of them in the same way as soon as money is available.

The future of our country depends largely upon the education of our children, and true patriotism demands that liberal appropriations be made for the support of our schools and that the money shall be expended with the strictest regard to economy consistent with efficiency. "The boys and girls of to-day will be the men and women of to-morrow," and it is a duty incumbent on us to see that they are given an education that will fit them to discharge all the duties of citizenship with credit to themselves and honor to their country. We should aim to have them better prepared to fight the battle of life than we were, for this is an age of progress, and those who do not keep up with the procession will only be laggards on the way.

All of which is respectfully submitted,

WM. ADAIR,

President.



REPORT OF THE SUPERINTENDENT.

SUPERINTENDENT'S REPORT.

To the Board of Education :

GENTLEMEN—I herewith submit for your consideration the fiftieth annual report of the public schools of this city.

At the close of last year there were fifty-three school buildings in commission. During the year there have been added as follows: Berry School, erected by the Board, Cottage Grove, Hibbard, M. M. Rose and Gratiot, inherited and purchased with the annexed territory. Lost by fire, one High School and closed on account of opening of the Berry, one, leaving at present time of fifty-six, which are classified as follows:

High School (in rented quarters)	1
Normal Training School and Ungraded	1
Full grammar grades	21
Primary	34
	57

There were at the close of last year 24,725 available sittings. Increase from added buildings and rented quarters making a total of 25,980 available sittings at close of this school year.

The failure to secure money from sale of bonds as allowed by Common Council and Board of Estimates finds

us at the end of this year in very distressing condition in some sections of the city from a lack of school accommodations.

In the territory annexed, near Jefferson, Gratiot and Woodward avenues, and in the vicinity of the Norvell, Bellefontaine and Tilden Schools, rented quarters should be secured at once that accommodations may be in readiness for the opening of schools September 1st. A careful examination of the increase of population in these sections will convince one of the pressing necessity that new buildings should be provided at once in the territory mentioned. The great loss sustained by the burning of the High School and the uncomfortable and very unhealthy quarters now occupied by this school, makes it very necessary that every effort should be put forth to hasten the completion of the High Schools contemplated. Each year the pressure is greater. New High Schools should have been erected five years ago and thus have avoided the crowded condition of to-day. The pupils who are now compelled to go through this school hampered and cramped, will never recover from the ill-effects occasioned by loss of opportunities due them from the city.

COURSE OF STUDY.

One year ago I submitted to you the Revised Course of Study, which you adopted and which has been in operation in the schools during the year just past. At present I wish to present certain facts and considerations bearing on the work under the new course of study.

Although the course of study is called new there is really little that is new in it. It is a growth out of the old course and has been evolved to meet the needs and demands of the progress and advancement of the present day

in matters pertaining to education. The effort has been toward improvement in the course of study and in the method of instruction in accordance with tested and confirmed principles of education.

No further changes are suggested this year because a course of study constantly under revision is a bad thing for a large system of schools. So the thought is that the present course may remain essentially unchanged until actual experience has again shown where it may be improved.

The principals and teachers of our schools after a year's trial have expressed themselves as pleased with the present course, and they are working seriously and earnestly to carry this course into full effect, and to make the work in the schools agree with its requirements.

It is a well recognized fact that the conditions are different in the different schools of our city, all cannot do the same amount of work in a given time, and so in the course of study the work to be done in any particular grade is defined in kind rather than in amount. The course of study determines what subjects are to be prescribed in each grade and leaves to the principals and their teachers the freedom of determining just how difficult the work in any particular subject shall be made.

The difficulty and breadth of the work can only be determined by the class in hand. Different classes in the same school differ in different years.

The aim is to have a strong teaching force and then give them the freedom to use their own best judgment in the adaptation of the work. An important part of the duty of each principal is to see that in his school the work is adapted to the educational needs of his pupils and the requirements of their condition.

Greater flexibility in the course of study requires increased ability in the individual principals and teachers. Superior teachers are hampered by a too rigid course of study, and the spirit of the present course is toward intelligent and well-directed freedom. The controlling idea should be the selection and use of that subject matter which will develop the greatest intellectual strength and moral character in each individual child. Intellectual force and moral power are the ends sought for.

The changes made in the course were mainly in the direction of unifying the work, making close the connection between the work of the different grades and coordinating the work in the different subjects. Special attention was given to the selection of the facts to be taught in each subject to determine those of prime importance and to have them presented in their natural relations. The general results of these changes have been increased interest on the part of both teachers and pupils presented on, and increased power in imparting and acquiring a knowledge of them.

LANGUAGE AND READING.—No part of the work of schools is more important than that in these two subjects. If a child can read easily and rapidly, if he has formed a habit of reading, and if in addition to this he can speak and write the English language correctly, the schools may be said to have done much for him.

During the past year great effort has been put forth to make our pupils better readers. The results in this branch had not been satisfactory, and consequently it was thought best to increase the time devoted to this subject in the primary grades where the children are learning to read. The schedules were arranged with an extra period each day to be devoted to this work.

In addition to this, exercises in reading were introduced into the language, science and number lessons whenever practicable, so that the children might acquire skill through constant practice.

Not only was the amount of reading greatly increased, but the method of teaching it has been improved. The sentence has been made the unit in taking in thought from the printed page, and in expressing thought in oral reading, and it has been found that children who read sentences rather than words read more rapidly and with better expression. By co-ordinating the reading lessons with those in science, history and literature, the subject matter has been rendered more interesting to the children, and the increased interest has meant increased skill in reading. Children are always interested in reading these lessons which they themselves help to make; and the lessons in geography, plant and animal study, a history story or a poem furnished material for many such lessons. The generous supply of reading matter furnished us in the way of good books has been of inestimable value in advancing the work. Children now read five or six books in a term instead of only one.

But to train children how to read is not sufficient. We must teach them what to read. We must develop a taste for the right kind of reading and give the child somewhat of an acquaintance with good books. In our revised course of study, history and literature are introduced into all the grades, mainly for the purpose of cultivating a taste for good reading. In the primary grades the children make the acquaintance of some of our best writers through their stories and poems, and in the grammar grades they read from Hawthorne, Longfellow, Whittier, Eggleston, Burroughs, Holmes, Dickens, Irving

and Shakespeare. Certainly this ought to result in an acquaintance with and a love for some of our best books and authors.

The critics of the public schools of our country have been calling attention to the fact that the boys and girls who have been trained in these schools cannot speak and write the English language correctly and fluently. The criticism is perhaps a just one. At any rate the fact is true that the tendency at present is to give more attention to the writing and talking of good English, and the extra time devoted to composition in our own schools during the past year is only a movement in harmony with the general educational work of the country. In order to write good English correctly and rapidly a great amount of practice is necessary, and this is furnished the children in the daily reproduction of their history, geography and literature lessons in the form of compositions. Continual writing under judicious criticism develops the power to write easily and correctly. This work in composition grows out of and supplements the work in all branches. It not only compels the pupils to think more clearly, but it trains them in correct expression and helps them to the knowledge they acquire. This demand for the reproduction of what has been taught makes the teaching more thorough and the pupils more attentive. The ability to read rapidly and to write fluently are among the most practical results our schools can show.

GEOGRAPHY.—The work in this subject is divided into two parts, elementary and foreign geography, the former including the work of the first three grades, and the latter including that of the next four grades; geography proper being merged into the history work in the eighth grade.

The elementary geography is a study of the child's

environment through observation. Its purpose is to develop in the child the ideas necessary for a comprehension of foreign geography and thus furnish the material for the study of the latter. It also trains the children to observe and interests them in things about them. During the first two years this work is oral and is taken up as part of the regular language work of the grade. In this elementary geography the forms of land and water as found here in Detroit are observed and described ; slopes, water partings and valleys, with their running waters forming streams are easily found in the vicinity of any school, and through their observation children get ideas of slopes and their influence in determining drainage. Belle Isle and the Detroit River furnish abundant material for developing ideas of island, coast, river, cape, bay, isthmus, etc. Direction, distance and location are taken up in connection with the study of their own city and the daily observation of the weather, together with the special study of the seasons as they come and go, furnish many ideas about climate, rain fall and the change of seasons. Their study of leaves and fruits in the fall, together with that of germination and growth from buds in the spring, also leaves and flowers, interests them in the yearly growth of vegetation and brings to their notice some of the relations of soil, heat, moisture and other conditions influencing this growth. Their study of home animals, domestic and wild, together with that of our commerce, mineral productions, our people, our ways of traveling, our buildings, our occupations, our manufactured articles, our principal streets and public buildings open the eyes of our children and help them to much information which is valuable in itself, and more valuable to use as an aid to the study of the world which lies beyond them, and which cannot be studied through observation but only through imagination. Children who

have made this study of home geography read more intelligently the maps and descriptions found in their geographies; they see the outside world through what they have seen in their own surroundings.

In our study of foreign geography more attention is given to physical geography than formerly, because it is believed to be the basis for the study of political geography. An effort has been made to drop out all unimportant, burdensome details and concentrate on great essentials, and then to so present these essentials in their proper relations that pupils will get ideas of cause and effect, and have somewhat of an apprehension of the unity and in interdependence of the earth and its inhabitants. In the study of a continent the first thing to claim attention is its structure, its highlands and lowlands, its great sloping plains or elevated plateaus, its outline, including great projections or indentations of coast. Then follows a study of its waterpartings and drainage basins as determined by this structure, and its lakes and river systems as located by these controlling slopes. The geographical and relative location of a continent together with its structure determine the amount of heat and moisture which it will receive and thus furnish the key to climate. Climate and soil determine vegetation and this in turn largely influences animal life. Mining regions are located largely by structure, and these in turn determine the occupation of the people in such regions, and so the whole is one continuous chain, each link having its proper place in the natural order of development and hence of study. The distribution of people, together with the characteristics and comparative civilization of each race follows this study of the physical features of the globe, and then political geography is taken up. The most important political divisions are studied with reference to comparative size, population, government, religion and

occupation of the people. Then follows a study of the great commercial routes and centers of the world, together with a special study of Michigan, United States and some of the leading countries of the world. The idea is to train the children to observe, to see relations, to think for themselves, rather than to memorize the thoughts of others, to study geography in an intelligent way and get a method of learning rather than simply an accumulation of memorized facts without the power to learn new ones continually and independently. This course of study is very broad and comprehensive, but at the same time entirely practical. To do this work successfully requires much study and preparation on the part of the teacher. The necessity for intelligent, energetic teachers is clearly seen. We have had a very generous supply of geographies, geographical readers, globes, moulding tables, etc., during the past year. We still need reference books for teachers and good physical wall maps. We feel that we are working along the right line. Another year our teachers will have had the benefit of this year's study and experience and we hope to do better work in geography in our schools.

HISTORY.—The primary object in teaching history to children is to interest them in the subject and make them readers of history. To do this requires time, and for this reason the work in this subject is begun in the first grade and continued through the entire course.

Theoretically it might seem as if this subject were beyond the younger children, but the fact has been proven that they can not only understand it but that they are intensely interested in it when properly adapted and prescribed. During the first three years this work is presented in the form of a story. Some prominent character, Benjamin Franklin, for instance, is selected, and the story of

his life, more particularly his boyhood, because that is more interesting to and more easily understood by the children, is told by the teacher to the children.

The story is illustrated by means of drawings on the blackboard and pictures. The pupils and teacher talk over each fact as it is presented, and then the pupils reproduce the story orally in their own language, and in the third grades they begin the written reproduction of the same. Several weeks are taken for each story. The children have time to absorb and assimilate the facts given, and instead of losing interest the interest increases from day to day.

These stories furnish material for many reading lessons from the blackboard; also the best kind of material for language lessons. The child is encouraged to tell the whole story. He is helped to clothe it in good language. He is led to narrate the facts in their logical sequence, and the whole furnishes an excellent opportunity for connected thinking and correct talking. Great care has been used in the selection of the material presented to find that which the children can understand and enjoy. The stories have all been graphical and have dealt with particular facts in the life of the individual rather than with generalizations. The object is through each story to give the child a picture of life during a certain period of our history; what the people did, how they lived and dressed, how they traveled, their manners and customs, etc.

In the fourth grade the children begin the reading of history through one of their regular readers, Dodge's Stories of American History, and this work is continued during one term of each year in the work of the three following grades, so that when the children reach the eighth grade they will have had four years' experience in reading history as a part of their regular reading lessons.

The historical readers selected a year ago have proven very satisfactory. That they are adapted to the needs of the pupils is indicated by the interest taken in the reading of them. In the eighth grade the study of history is taken up in a methodical, comprehensive way, the time being given to the thorough study of important events in their relations to each other. Less attention is given to battles and unimportant dates and more to the territorial development of the country, the growth of its institutions, the home life and progress of the people, their manners, customs, inventions, etc. All past events should be studied in their living relations to the present. A child studies the past only that he may understand the present in which he lives. This history study through the grades furnishes abundant material for composition work. It also serves as a valuable means of moral instruction. This study of human life and character brings up almost every phase of human conduct, and furnishes innumerable opportunities for the forcible development of right conduct concepts in the minds of the children.

ARITHMETIC.—The work in arithmetic in the schools as a whole is very satisfactory. The tendency has been to make the work somewhat easier and then secure greater accuracy and rapidity in its execution. So large a proportion of our children drop out before reaching the grammar grades that its was thought best to introduce simple work in percentage into the third and fourth grades, and simple work in interest into the fourth grade, so that children might not leave our schools without knowing something of the practical business use of these subjects in their every day application. The attempt has been successful, and children in these grades have shown that they could grasp these ideas and apply them in the solution of simple problems. Simple objective work in fractions has also been

successfully introduced into the lower grades. Through this work pupils get ides of the relation of fractional parts to each other. They also get the language of fractions, both of which helps to lay a good foundation for the study of fractions in the grammar grades. The present policy is to have the work in the different subjects run parallel through the different grades, increasing in difficulty step by step, rather than to place one subject in each grade, finish it there and then drop it and take something else. It is believed that this generates more power in the child and lends greater variety and interest to the subject. Natural growth is slow, continuous and uninterrupted and it is thought that arithmetical ideas in their growth follow this general law of nature.

FREE TEXT BOOKS.

This great change in the matter of text books was made at the beginning of the school year, yet not in its fullest sense; books were furnished only to those pupils who were compelled to have books different from those used the previous year; those having such books as were used in their respective classes were obliged to use them until such time as they would need new ones, except in the case of copy and drawing books, which were furnished to all, as the life of such books is for but one term.

Under this plan the entire cost for the year was $23,960.33 for regular text books, with an additional cost of $4,241.15 for copy and drawing books, making a total cost of $28,201.45.

The whole number of pupils enrolled was 29,094. The average membership 22,293. The total cost of text books proper was $23,960.30, an average cost of $1.08, based on average membership. The total cost of copy and

drawing books was $4,241.15, at an average cost of $0.19, based on average membership. I estimate that the cost of text books proper for the next year will be considerably less for various reasons, viz.: Each school is supplied with different sets of readers which, with very few additions, will carry them through the year, the larger portion of pupils requiring the more expensive books were furnished this year. Consequently I expect a considerably falling off in cost next year.

The benefits derived from this introduction are quite evident. Previous to this introduction I had grave doubts of the advisability of such a step, but the experience of the past year has more than removed every doubt, and I know that our schools can do better work with free text books than under the old system. The efficiency of the schools has been increased by the teachers being able to commence the work at once upon the opening of the term instead of waiting sometimes for weeks to get all the books and materials that are necessary. This saving of time is of much importance in the handling of so many children.

Under the old law the bad effects resulting from the introduction of a poor text book were very hard to obviate, as the law compelled the use of the book for a period of not less than five years. Under the present free text book system in the case of selection of a poor book the evil can be remedied almost as soon as discerned and without any greater loss than simply the money already invested in the copies of the book on hand.

The increased enrollment is another proof of the benefit of free text books. Over 2,000 names have been enrolled that are due to this change, and I have no doubt that the next year a larger increase will be found.

EXAMINATIONS AND PROMOTIONS.

The subject of examinations and promotions is one of great importance because it influences so largely the character of the work done in the schools. The question as to whether or not the uniform written examination given at stated times shall be made the basis for promotion is one which has attracted widespread attention among educators, and the feeling has grown that such an examination should not be made the basis for promotion, in fact promotion examinations have been abandoned in many of our cities.

Examinations should be used as a potent means of teaching, and not as an end in the decision of whether or not a child shall be advanced to the next higher class. Each topic or subject in each of the thought studies, history, geography, science and literature when about to be completed should be finished by the written expression of what the child knows on the subject in the form of a composition, and these written productions while forming an important part of the language work are also tests of the child's knowledge. The daily class work of the pupil, together with all these written compositions, furnish the teachers abundant materials for judging whether or not a child should be promoted. Records should be kept by teachers and given to principals of the work of each individual child. These examinations thus become a part of the regular legitimate work of the school room, a means of stimulating attention, intensifying interest, fixing thought and cultivating the power of expression.

Observations during the past year indicate the fact that there are too many non-promoted pupils in our primary schools. Of course there are exceptions where from sickness, mental inability or other good reasons, pupils are unable to do the work of the class, but ordinarily if a pupil

has been regular in attendance, he should do the work of the class and be advanced with the class. Where many non-promotions occur the matter needs attention. Either the teaching is inefficient, the course too difficult, the standard for promotion unreasonably high, or for some other reason which needs investigation, the children's best interests are being sacrificed. Pupils often lose interest and ambition and become stupid from being kept in one grade too long. The average school life of the great mass of our children is far too short at best, and it is a matter of prime importance that their time be spent most profitably, the work done most expeditiously, and each individual child be advanced as rapidly as his capacity will allow him to go forward in his work.

A child's power to do the work of a grade should determine when he should enter that grade. Individual promotions should be made at any time during the term when any particular child shows the power to do more difficult work than that of the class in which he is found, and classes as a whole should be promoted at any time during the term or year when they may be ready to take the step in advance. A class should never be kept "marking time" until the end of the term comes, or the time arrives at which it is customary to make promotion.

SCHOOL MANAGEMENT.

Good conduct and right living is the end of education. Strength and beauty of character are the most desirable results which our schools can produce. All true education centers in the individual and develops that personal force and power which best fits him for successful living and individual usefulness in life. The best order in a school room is that which springs from self-control and self-

direction on the part of the pupils rather than from external sources, such as fear of punishment or hope of reward.

It gives me pleasure to report that the general order in our schools is excellent, the pupils are obedient and respectful, and their uniform good behavior is the outgrowth of the interest in the work. Pupils can be too busy for mischief. Disorder if often nothing more than misdirected energy, and the utilizing of this force in the doing of legitimate work destroys the conditions for disorder. As skill on the part of our teachers increases, the difficulties in school management decrease, a better understanding of child nature, and a more thorough knowledge of the work to be done and its adaptation to the needs of the children enables a teacher to govern pupils through their interest in and love for their work.

The general attitude of our teachers toward the work, their interest in and sympathy with the pupils, and their harmonious and helpful relations to each other and to their principals and superintendents has engendered an atmosphere of mutual helpfulness and unity of purpose which is productive of good order and good work.

EVENING SCHOOLS.

In my report of last year I suggested that some plan should be adopted whereby a more regular attendance might be had, and referred to the one in force up to four years ago, viz.: That each pupil be assessed a certain amount when enrolled, which amount should be held as a prepaid fine for any misdemeanor under the rules, and also as a guaranty of regular attendance, said amount to be refunded if not forfeited. Different principals of the schools under the old rule, concur in my recommendation. These suggestions were not acted upon last year, and the results

as to attendance were very unsatisfactory. I would therefore renew my suggestions and earnestly recommend that some measure be taken toward improving this defect.

Under the rules, October 1st, the following buildings were opened for evening sessions: High, Duffield, Norvell, Trowbridge, Webster, Pitcher and Hancock, with an enrollment at the end of the first week of 1,437 pupils. The attendance after the first month was unsteady, and at the end of eight weeks rooms were closed in several buildings, and other rooms were closed during the next month. At the end of the third month two buildings were closed and at the end of four months all were closed with a very small attendance in each.

Although the teaching force was up to the general average, great care should be taken in the selection of the teachers for this important branch of our educational system by the appointment of persons especially adapted for this kind of work.

With classes who were regular in their attendance the results were satisfactory, and if, as I suggested, means are taken to make the attendance more regular, the benefits will be in proportion.

Pupils who are irregular in attendance not only lose the opportunity of improving themselves, but the moral effect of such irregularity is bad. The following shows enrollment and attendance:

SCHOOLS.	ENROLLMENT.			AV. ATTEND-
	Boys.	Girls.	Total.	Total.
High.....	350	110	460	260
Pitcher.....	314	68	382	109
Norvell.....	244	72	316	179
Duffield.....	237	97	334	108
Hancock.....	98	31	129	48
Webster.....	257	37	294	106
Trowbridge.....	161	28	189	76
	1,661	443	2,104	886

MANUAL TRAINING.

It seems scarcely necessary for me to reiterate the many arguments in favor of manual training which I have from time to time during the past six years presented to the honorable Board of Education for consideration. As early as October, 1887, Mr. Levi L. Barbour and Mr. Emory Wendell, on behalf of some of the leading citizens of Detroit, presented petitions to the Board of Education begging that serious consideration be given to this subject of industrial education, and urging its establishment as a part of the regular course of study in our schools, also call-

; attention to the fact of its adoption in many of the cding cities of the country, both east and west. The tter was at this time referred to the Superintendent and Committee on Text Books and Course of Study.

This Committee, to whom the introduction of manual ining was referred, made a report in which they earnestly ommended the establishment of an Industrial High hool. The report was referred to the Committee on nance and they were requested by the Board to ask an propriation of $60,000 for such a school, which request as refused by the Board of Aldermen and the Board of timates.

The subject has been agitated more or less ever since citizens and school officials who realize the value of is branch of the work and the consequent incomplete-ss of our present course of study.

During the past year an offer was made to the Board Education, by some of our public-spirited citizens, of e sum of $100,000 for the establishment of such a school. is offer was refused, and I take this opportunity to ask a onsideration of the matter, and most earnestly recom-nd that the offer if still open be accepted and a Manual aining School established in connection with our new gh School.

INSTITUTE.

An institute provided for by the State Superintendent Public Instruction was held in Detroit March 22–25, 93.

The Board of Education granted permission to close e schools on these dates in order that the teachers might end the institute which convened in the Church of Our ther, Wednesday, March, 22, at 9 A. M. Great interest

was manifested throughout all its sessions and much good work was done. The instructors were Supt. W. B. Powell, of Washington, D. C., who discussed the subjects of language and geography; Miss Sarah Arnold, of Minneapolis, Minn., who presented Language and Reading for Primary Grades; Dr. Richard Boone, of the Indiana State University, who lectured on Applied Psychology, and Dr. A. E. Winship, of Boston, who instructed the teachers in History and Pedagogy. The work done by the instructors was of a very practical nature, the teachers were stimulated as well as instructed, and the institute resulted in better work in the schools, and the benefits derived from this meeting justified the closing of the schools at this time.

STATISTICAL TABLES.



nrollment. Attendance, Etc., in Each School.

SCHOOLS.	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 22, '92.
.....	508	278	261	7
.....	958	498	465	14
e.....	992	561	528	12
....	347	157	149	8
ie.....	73	24	22	...
.....	552	187	174	13
... .	2,235	1,055	990	25
....	565	323	303	7
.....	654	309	280	7
.....	2,019	963	917	25
.....	534	277	261	7
....	733	349	326	9
.....	851	411	382	9
ve.....	55	34	30	1
....	586	268	252	8
.....	63	33	30	1
.....	533	242	226	7
.....	1,511	778	737	19
.....	974	462	434	13
.....	534	266	248	7
.....	677	292	266	9
....	749	290	274	7
.....	541	275	253	7
.....	220	108	101	4
.....	38	22	21	1
.....	879	488	451	14
.....	265	141	120	8
....	297	134	124	4

ENROLLMENT, ATTENDANCE, ETC.—*Continued.*

SCHOOLS.	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 22, '98.
...	890	441	417	13
s	1,375	495	461	15
	1,350	1,017	848	37
				7
ls	46,050	22,293	20,776	603

ım of the enrollments in all the schools, including transfers from one ol to another, or from one room to another in the same school, is as shown

'e	46,050
t on account of duplicate enrollments	16,956

ctual number of different names enrolled in all the schools during the year 29,094

STATEMENT OF PROMOTIONS

(Half Yearly) for the School Year Ending June 22, 1893.

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Bagley ..	... ..		...	407	72	278	407	72	278
Barstow	412	78	251	370	80	230	782	79	481
Bellefontaine	239	97	123	584	60	448	723	68	571
Bellevue				230	73	187	230	73	187
New Bellevue			.....	33	69	48	33	69	48
Berry	136	78	100	78	69	87	234	135	187
Bishop	719	85	419	1,034	80	636	1,734	82	1,055
Brownson				465	72	323	465	72	323
Campbell				336	54	309	336	54	309
Cass	906	78	575	587	75	398	1,493	77	973
Chaney				350	65	277	350	65	277
Clay	83	106	39	522	84	310	605	86	349
Clinton				514	62	411	514	62	411
Cottage Grove				39	57	34	39	57	34
Craft . .				391	73	268	391	73	268
Custer				45	68	33	45	68	33
Dickinson			...	395	81	242	395	81	242
Duffield	758	89	425	599	55	353	1,357	67	778
Everett ...	272	81	166	449	76	296	721	78	462
Farrand	179	96	93	298	86	178	477	89	271
Ferry	27	54	25	354	56	267	381	61	292
Firnane				382	66	290	382	66	290

PROMOTIONS.—*Continued.*

OLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
.....	65	79	41	373	79	234	438	79	275
.....	.....	....	.....	160	74	108	160	74	108
.....	.....	....	.....	33	75	22	33	75	22
.....	354	80	219	323	60	269	677	69	488
.....	.....	....	.....	213	75	141	213	75	141
.....	.....	....	.....	204	76	134	204	76	134
.....	267	90	148	425	77	276	692	81	424
.....	.....	....	.....	444	77	286	444	77	286
.....	592	84	352	383	89	215	975	86	567
.....	.....	....	.....	434	71	304	434	71	304
.....	668	93	357	629	73	427	1,292	82	784
.....	.....	....	.....	310	65	236	310	65	236
.....	.....	....	.....	380	53	354	380	53	354
.....	.....	....	.....	75	42	89	75	42	89
.....	66	73	45	434	72	300	500	72	345
.....	210	81	129	594	75	396	804	76	525
.....	.....	....	.....	409	79	259	409	79	259
.....	37	80	23	171	78	109	208	79	132
.....	156	75	104	588	59	498	744	69	602
n.....	77	75	51	455	72	316	532	72	367
.....	.....	....	.....	560	72	390	560	72	390
.....	414	84	246	432	74	293	846	78	539
.....	.....	....	.....	303	62	243	303	62	243
.....	86	100	43	395	74	265	481	78	308
M.....	.....	....	.....	55	69	40	55	69	40
.....	.....	....	.....	492	71	344	492	71	344

PROMOTIONS.—*Continued.*

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions	Average number belonging.
Tappan.....	474	88	269	684	77	442	1,158	81	711
Tilden	528	91	290	782	80	483	1,310	84	773
Trowbridge.....	335	83	231	535	71	238	728	77	469
Van Dyke	152	85	89	494	88	300	646	83	389
Washington ...	319	81	220	457	78	291	816	80	511
Webster ...	859	93	561	758	66	569	1,617	[illegible]	1,130
Wilkins....	282	88	134	532	86	309	784	86	443
Williams	113	83	69	719	84	436	832	81	505
Totals .	9,340	86	5,747	22,439	73	15,456	32,279	76	21,203

General School Statistics for the School Year Ending June 22, 1893.

Population of the city of Detroit, 250,000.

Valuation of the property of the city, $184,229,180.

Amount of levy for all municipal purposes, $3,062, 948.63.

Amount of levy for the current expenses of the public schools, $306.505.75.

Amount received from sale of bonds, school sites and buildings, nothing.

Amount appropriated for all school purposes, $856,505.75.

Per cent of school taxes upon entire municipal levy, 27.96.

Amount of money received from primary school fund, $129,159.94.

9. Whole cost of superintendence and instruction, including evening schools, $395,499.99.

10. Whole cost of incidentals, including all current school expenses, except those named in 9, above, $174,309.82.

11. Amount paid for sites and school buildings, $75,421.24.

12. Average weeks of membership of each pupil enrolled, 30.6.

13. Average weeks of attendance of each pupil enrolled, 28.5.

14. Average salary of all teachers, including principals, first assistants and specials, $647.42.

15. Average salary of all teachers, excluding principals, first assistants and specials, $576.17.

16. Total cost of tuition in evening schools, $7,497.

17. Total cost of tuition in ungraded schools, $4,500.

18. Per cent of promotions on average membership, 76.

HOOL CENSUS FOR THE LAST FIFTY-TWO YEARS.

YEAR.	Census.	YEAR.	Census.
.....	2,093	1867.....	21,742
.....	2,239	1868.....	22,810
.....	2,578	1869.....	27,039
.....	3,146	1870.....	26,641
.....	3,426	1871.....	26,779
.....	3,882	1872.....	30,280
.....	5,846	1873.....	31,936
.....	6,546	1874.....	33,772
.....	6,306	1875.....	34,593
....	6,965	1876.....	35,172
....	7,253	1877.....	35,739
.....	7,883	1878.....	35,962
.....	8,530	1879.....	37,684
.....	9,983	1880.....	39,467
.....	9,912	1881.....	37,926
.....	10,502	1882.....	40,901
.....	12,688	1883.....	43,840
.....	13,188	1884.....	45,641
.....	13,908	1885.....	53,049
.....	14,159	1886.....	56,488
....	14,140	1887.....	66,963
. . ..	15,398	1888.....	65,182
. ...	16,473	1889.....	63,009
.....	17,399	1890.....	72,673
.....	18,710	1891.....	80,500
.....	20,350	1892.....	79,922

Pupils who are irregular in attendance not only lose the opportunity of improving themselves, but the moral effect of such irregularity is bad. The following shows enrollment and attendance:

SCHOOLS.	ENROLLMENT.			AV. ATTEND.
	Boys.	Girls.	Total.	Total.
High	350	110	460	260
Pitcher	314	68	382	109
Norvell	244	72	316	179
Duffield	237	97	334	108
Hancock	98	31	129	48
Webster	257	37	294	106
Trowbridge	161	28	189	76
	1,661	443	2,104	886

MANUAL TRAINING.

It seems scarcely necessary for me to reiterate the many arguments in favor of manual training which I have from time to time during the past six years presented to the honorable Board of Education for consideration. As early as October, 1887, Mr. Levi L. Barbour and Mr. Emory Wendell, on behalf of some of the leading citizens of Detroit, presented petitions to the Board of Education begging that serious consideration be given to this subject of industrial education, and urging its establishment as a part of the regular course of study in our schools, also call-

ing attention to the fact of its adoption in many of the leading cities of the country, both east and west. The matter was at this timé referred to the Superintendent and the Committee on Text Books and Course of Study.

This Committee, to whom the introduction of manual training was referred, made a report in which they earnestly recommended the establishment of an Industrial High School. The report was referred to the Committee on Finance and they were requested by the Board to ask an appropriation of $60,000 for such a school, which request was refused by the Board of Aldermen and the Board of Estimates.

The subject has been agitated more or less ever since by citizens and school officials who realize the value of this branch of the work and the consequent incompleteness of our present course of study.

During the past year an offer was made to the Board of Education, by some of our public-spirited citizens, of the sum of $100,000 for the establishment of such a school. This offer was refused, and I take this opportunity to ask a reconsideration of the matter, and most earnestly recommend that the offer if still open be accepted and a Manual Training School established in connection with our new High School.

INSTITUTE.

An institute provided for by the State Superintendent of Public Instruction was held in Detroit March 22–25, 1893.

The Board of Education granted permission to close the schools on these dates in order that the teachers might attend the institute which convened in the Church of Our Father, Wednesday, March, 22, at 9 A. M. Great interest

was manifested throughout all its sessions and much good work was done. The instructors were Supt. W. B. Powell, of Washington, D. C., who discussed the subjects of language and geography ; Miss Sarah Arnold, of Minneapolis, Minn., who presented Language and Reading for Primary Grades ; Dr. Richard Boone, of the Indiana State University, who lectured on Applied Psychology, and Dr. A. E. Winship, of Boston, who instructed the teachers in History and Pedagogy. The work done by the instructors was of a very practical nature, the teachers were stimulated as well as instructed, and the institute resulted in better work in the schools, and the benefits derived from this meeting justified the closing of the schools at this time.

❋ STATISTICAL TABLES. ❋

Enrollment, Attendance, Etc., in Each School.

SCHOOLS.	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 22, '93.
Bagley	508	278	261	7
Barstow	968	498	465	14
Bellefontaine	992	561	538	12
Bellevue	347	157	149	3
New Bellevue	73	34	28	..
Berry	552	187	174	13
Bishop	2,233	1,055	990	25
Brownson	565	325	303	7
Campbell	654	309	290	7
Cass	2,019	963	917	25
Chaney	584	277	261	7
Clay	788	349	326	9
Clinton	851	411	382	9
Cottage Grove	55	34	30	1
Craft	586	308	282	8
Custer	63	32	30	1
Dickinson	533	242	226	7
Duffield	1,511	778	737	19
Everett	974	462	434	13
Farrand	531	266	246	7
Ferry	677	292	266	9
Firnane	749	290	274	7
Franklin	541	275	253	7
Garfield	220	108	101	4
Gratiot	58	22	21	1
Hancock	979	488	451	14
Hibbard	265	141	120	3
Hickey	297	134	124	4

ENROLLMENT, ATTENDANCE, ETC.—*Continued.*

SCHOOLS.	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 24 '96.
Houghton	684	424	402	14
Hubbard	581	286	274	7
Irving	1,074	567	536	15
Jackson	739	304	288	9
Jefferson	1,637	784	794	19
Johnston	464	236	222	4
Lincoln	678	334	325	9
Livernois	188	89	81	2
Miami	400	97	85	5
McKinstry	909	345	316	9
Newberry	1,174	523	499	14
Nichols	511	259	241	7
Normal	243	132	123	8
Norvell	1,172	602	583	14
John Owen	775	367	354	9
Palmer	858	390	365	9
Pitcher	869	539	508	15
Potter	542	243	226	7
Roberts	602	308	291	9
Rose, M. M.	68	40	38	1
Russell	906	344	323	9
Tappan	1,600	711	677	18
Tilden	1,598	775	730	15
Trowbridge	915	469	447	15
Van Dyke	1,001	389	367	9
Washington	1,066	511	469	14
Webster	2,032	1,030	974	22

ENROLLMENT, ATTENDANCE, ETC.—*Continued.*

SCHOOLS.	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers June 22, '98.
Wilkins	890	441	417	13
Williams	1,875	495	461	15
High	1,350	1,017	848	87
Specials	.....	.....	.....	7
Totals	46,050	22,293	20,776	603

The sum of the enrollments in all the schools, including transfers from one school to another, or from one room to another in the same school, is as shown above 46,050

Deduct on account of duplicate enrollments 16,956

Actual number of different names enrolled in all the schools during the year 29,094

STATEMENT OF PROMOTIONS

(Half Yearly) for the School Year Ending June 22, 1893.

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Bagley				407	72	278	407	72	278
Barstow	412	78	263	370	80	280	782	79	493
Bellefontaine	239	87	123	524	60	438	763	68	561
Bellevue				220	78	167	220	78	167
New Bellevue				53	60	48	53	60	45
Berry	156	78	100	78	69	87	234	125	187
Bishop	719	85	419	1,094	80	686	1,734	82	1,055
Brownson				465	72	328	465	72	328
Campbell				336	54	309	336	54	309
Cass	906	78	575	587	75	386	1,493	77	965
Chaney				350	65	277	350	65	277
Clay	83	106	39	522	84	310	605	86	349
Clinton				514	62	411	514	62	411
Cottage Grove				39	57	34	39	57	34
Craft				391	73	268	391	73	268
Custer				45	68	33	45	68	33
Dickinson				395	81	242	395	81	242
Duffield	458	89	425	509	85	353	1,357	87	778
Everett	272	81	166	449	76	296	721	78	462
Farrand	179	96	93	298	86	173	477	89	266
Ferry	27	54	25	354	66	267	381	63	292
Firnane				382	86	290	382	86	290

PROMOTIONS.—*Continued.*

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Franklin	65	79	41	373	79	234	438	79	275
Garfield	.....	.....	.....	160	74	108	160	74	108
Gratiot	.....	.....	.....	33	75	22	33	75	22
Hancock	354	80	219	323	60	269	677	69	488
Hibbard	.....	.....	.....	213	75	141	213	75	141
Hickey	.....	.....	.....	204	76	134	204	76	134
Houghton	267	90	148	425	77	276	692	81	424
Hubbard	.....	.....	.....	444	77	286	444	77	286
Irving	592	84	352	383	89	215	975	86	567
Jackson	.....	.....	.....	434	71	304	434	71	304
Jefferson	663	93	357	629	78	427	1,292	82	784
Johnson	.....	.....	.....	310	65	236	310	65	236
Lincoln	.....	.....	.....	380	53	354	380	53	354
Livernois	.....	.....	.....	75	42	89	75	42	89
McKinstry	66	73	45	434	72	300	500	72	345
Newberry	210	81	129	594	75	396	804	76	525
Nichols	.....	.....	.....	409	79	259	409	79	259
Normal	37	80	23	171	78	109	208	79	132
Norvell	156	75	104	588	59	498	744	62	602
John Owen	77	75	51	455	72	316	532	72	367
Palmer	.....	.....	.....	560	72	390	560	72	390
Pitcher	414	84	246	432	74	293	846	78	539
Potter	.....	.....	.....	303	62	243	303	62	243
Roberts	86	100	43	395	74	265	481	78	308
Rose, M. M	.....	.....	.....	55	69	40	55	69	40
Russell	.....	.....	.....	492	71	344	492	71	344

PROMOTIONS.—*Continued.*

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Tappan.....	471	66	299	684	77	442	1,156	71	741
Tilden	328	91	290	782	80	485	1,110	84	775
Trowbridge.	295	83	221	838	71	338	733	77	449
Van Dyke	152	85	89	494	92	300	646	88	389
Washington . .	359	81	220	457	78	291	816	80	511
Webster	859	93	461	758	86	569	1,617	78	1,030
Wilkins	282	88	132	623	86	309	764	86	441
Williams... .	113	82	69	719	84	426	832	81	495
Totals	9,640	86	5,747	22,489	73	15,456	32,379	76	21,203

General School Statistics for the School Year Ending June 22, 1893.

1. Population of the city of Detroit, 250,000.
2. Valuation of the property of the city, $184,229,130.
3. Amount of levy for all municipal purposes, $3,062, 948.63.
4. Amount of levy for the current expenses of the public schools, $306.505.75.
5. Amount received from sale of bonds, school sites and buildings, nothing.
6. Amount appropriated for all school purposes, $856,505.75.
7. Per cent of school taxes upon entire municipal levy, 27.96.
8. Amount of money received from primary school fund, $129,159.94.
9. Whole cost of superintendence and instruction, including evening schools, $395,499.99.
10. Whole cost of incidentals, including all current school expenses, except those named in 9, above, $174,309.82.
11. Amount paid for sites and school buildings, $75,421.24.
12. Average weeks of membership of each pupil enrolled, 30.6.
13. Average weeks of attendance of each pupil enrolled, 28.5.
14. Average salary of all teachers, including principals, first assistants and specials, $647.42.
15. Average salary of all teachers, excluding principals, first assistants and specials, $576.17.
16. Total cost of tuition in evening schools, $7,497.
17. Total cost of tuition in ungraded schools, $4,500.
18. Per cent of promotions on average membership, 76.

General School Statistics for the Three Departments for the School Year Ending June 22, 1893.

	Primary Grade.	Grammar Grade.	High School.	Total and Average
1. Number of different names enrolled	21.491	6,500	1,103	29,094
2. Average membership for the year	15,529	5,747	1,017	22,293
3. Average daily attendance for the year	14,457	5,465	848	20,770
4. Per cent of attendance on membership	93	95	93.2	93.1
5. Number of pupils in membership at close of year	15,052	5,419	1,000	21,471
6. Number of male teachers, including Sup't	5	13	9	27
7. Number of female teachers	358	191	23	577
8. Average number of teachers, excluding superintendent and special teachers	253	195	37	585
9. Average number of teachers, including specials	.....	.....	.....	594
10. Average number of pupils to the teachers, excluding specials	43.1	29	27.4	37.4
11. Cost per capita for instruction	11.96	20.26	36.16	17.22
12. Cost per capita for incidentals, based on average membership	7.82	7.82	7.82	7.82
13. Cost per capita, including all current expenses, except money invested in school buildings	19.80	28.10	44.00	25.04
14. Cost per capita in ungraded department	.....	.....	.....	46.40
15. Number of days the schools were actually in session	.....	.....	.....	192

Location, Number of Rooms, Seating Capacity, Average Attendance, Etc.

SCHOOLS.	LOCATION.	Number of rooms.	Number of seats.	Average attendance for the year.	Average number of teachers for the year	Average No. of pupils to teacher.
Bagley	Fourteenth and Pine	6	351	261	7	37
Barstow	Larned and Riopelle	12	560	465	14	33
Bellefontaine	Fort near Morrell	10	515	538	12	44
Bellevue	Bellevue near Champlain	3	132	149	3	50
New Bellevue	Bellevue near Waterloo	1	56	32	½	11
Berry	Concord near Mack	12	530	174	6½	27
Bishop	Winder near Rivard	22	1,179	990	25	40
Brownson	Maple near Chene	6	307	303	7	43
Campbell	St. Aubin and Alexandrine	6	303	280	6½	43
Cass	Grand River and Second	22	1,065	917	25	37
Chaney	Sullivan and Linden	6	331	261	7	37
Clay	Pitcher near Cass	8	407	326	9	36
Clinton	Clinton near Rivard	8	445	382	9	42
Cottage Grove	Van Dyke bet. Jeff. and Mack	1	42	30	1	30
Craft	Vinewood and Ash	8	396	252	7½	34
Custer	Hammond and Ranspach	2	125	30	1½	20
Dickinson	Twelfth and Brigham	8	392	226	7	32
Duffield	Clinton near Chene	18	901	737	19	39
Everett	Fort near Hastings	12	606	434	13	33
Farrand	Harper and John R	6	331	248	7	35
Ferry	Ferry and Jos. Campau	8	393	266	9	29
Firnane	Fort near McDougall	8	383	271	6½	42
Franklin	Seventh near Locust	6	337	255	7	36
Garfield	Rivard and Frederick	4	203	101	3½	29
Gratiot	Gratiot ave. (Leesville)	1	42	21	1	21
Hancock	Hancock and Fourteenth	12	593	451	13½	33
Hibbard	McLellan north Jefferson	2	168	120	2½	48
Hickey	Eighteenth and McGraw	4	193	124	4	31
High	Jefferson ave. and Brush	4	858	848	37	27
Houghton	Abbott and Sixth	12	583	402	14	29

LOCATION, ETC.—*Continued.*

SCHOOLS.	LOCATION.	Number of rooms.	Number of seats.	Average attendance for the year	Average number of teachers for the year	Average No. of pupils to teacher.
Hubbard	Twenty-fifth and Labrosse ...	6	334	274	7	39
Irving	Willis near Woodward	12	663	536	15	36
Jackson. ...	Fort near Chene.	8	406	283	9	31
Jefferson	Selden and Crawford.	16	867	724	19	38
Johnston	Waterloo and Dubois. ...	4	228	223	4	55
Lincoln	Brady and Antoine	8	448	326	9	36
Livernois ..	Livernois near Michigan.....	2	117	81	2	40
Miami	Miami near Gratiot. ...	5	142	35	5	14
McKinstry...	McKinstry and McMillan	8	433	316	8½	37
Newberry	Twenty-ninth near Visgar.	12	531	499	14	36
Nichols ...	Elm near Seventh..	6	303	241	7	34
Normal ...	Miami near Gratiot. ..	5	151	123	8	15
Norvell .	Arndt near Campau	12	645	583	14	42
John Owen .	Myrtle near Thirteenth .	8	411	354	9	39
Palmer	Horton near Beaubien ...	8	414	366	9	40
Pitcher	Sullivan near Butternut.	12	558	508	15	34
Potter	Tillman near Myrtle.	6	303	226	7	32
Roberts.	Adelaide near Antoine	8	302	291	8¾	34
Rose, M. M ...	Van Dyke north Gratiot ave	1	48	38	1	38
Russell .	Russell near Elliot ...	8	438	323	9	36
Tappan .	Thirteenth and Marantette. .	16	806	677	18	38
Tilden	Kirby and Seventh ...	12	738	730	15	49
Trowbridge.	Forest and Antoine	12	608	417	14½	31
Van Dyke	Field and Agnes	8	387	367	9½	39
Washington.	Beaubien and Madison .. .	12	580	409	14	34
Webster	Twenty-first and Howard	19	1,060	974	21½	45
Wilkins .	Porter and Second .	12	602	417	13	32
Williams .	Canfield and Mt Elliot	12	605	461	14	33
Totals.	.. ... .	496	25,980	20,756	583	36

SCHOOL CENSUS FOR THE LAST FIFTY-TWO YEARS.

YEAR.	Census.	YEAR.	Census.
1841	2,093	1867	21,742
1842	2,239	1868	22,810
1843	2,578	1869	27,039
1844	3,146	1870	26,641
1845	3,496	1871	28,779
1846	3,882	1872	30,280
1847	5,846	1873	31,986
1848	6,546	1874	33,772
1849	6,306	1875	34,593
1850	6,965	1876	35,172
1851	7,253	1877	35,739
1852	7,883	1878	35,962
1853	8,520	1879	37,684
1854	9,983	1880	39,467
1855	9,912	1881	37,926
1856	10,502	1882	40,201
1857	12,688	1883	43,840
1858	13,138	1884	45,641
1859	13,208	1885	53,049
1860	14,159	1886	56,488
1861	14,146	1887	66,963
1862	15,398	1888	65,132
1863	16,473	1889	68,009
1864	17,399	1890	72,673
1865	18,710	1891	80,500
1866	20,350	1892	79,922

The following table shows the different salaries paid per school month, and the number of teachers to whom certain salaries are paid, according to the pay roll of June, 1893:

19 teachers at——	$ 12 00
47 teachers at ——	35 00
40 teachers at	40 00
47 teachers at	45 00
46 teachers at	50 00
42 teachers at	55 00
36 teachers at	60 00
3 teachers at	62 50
44 teachers at	65 00
24 teachers at	67 50
14 teachers at	70 00
117 teachers at	72 50
4 teachers at	75 00
42 teachers at	80 00
11 teachers at	85 00
2 teachers at	87 50
17 teachers at	90 00
10 teachers at	100 00
4 teachers at	120 00
15 teachers at	130 00
3 teachers at	140 00
1 teacher at	150 00
3 teachers at	160 00
2 teachers at	180 00
6 teachers at	200 00
1 teacher at	275 00

Total number of teachers, 603.

SUPERVISOR'S REPORT, PRIMARY GRADES

REPORT OF THE SUPERVISOR OF PRIMARY GRADES.

To Superintendent W. E. Robinson:

I have the honor to submit to you the following report of the Primary Department of the Detroit Public Schools for the year ending in June, 1893.

The chief efforts of the past year have been directed to the improvement of the Language and Reading in these grades, and it affords me pleasure to report favorably on the work accomplished. History, Science and Literature have been made the basis of the work in oral and written composition, and the aim has been primarily to interest the children in these subjects and secondarily to train them in the good expression of the thought evolved on these subjects. The power to speak and write the English language correctly and fluently can come only through much practice. Recognizing this fact, and also recognizing the great practical value of such a power of expression in the child, a very conspicuous place has been given to Language Training in these grades. It has been made an important part of the work in all branches. The work in History, Science and Literature has not only furnished the basis for the language work, but of far greater value has been the effects of the introduction of these subjects in the way of enriching the course of study, opening new fields of truth to the

children and thus greatly advancing their mental and moral growth. The effects of the introduction of these subjects has been felt upon both teachers and children, their thought has been quickened and a new impetus has been given to the work in our schools.

In the Grade Meetings throughout the year this subject of Language Training has been constantly before the teachers for thought and careful consideration. Each part of the work has been taken up in turn, subject matter discussed, methods of teaching suggested, notes compared and the work carefully outlined. This new work has required much thought and study on the part of the teachers, and their willingness, energy and enthusiasm in this field is only another proof of their superiority and faithfulness. That good work is being done in our schools is due largely to the untiring efforts and faithful conscientious work of our grade teachers, on them depends the final outcome of the work as outlined by the superintendents and supervisors. What the individual grade teacher is, that will the schools be; anything which promotes their growth and happiness advances the work of the school as a whole.

The substance of the thoughts presented in the Grade Meetings on this subject of Language Training has been condensed, carefully arranged and adapted to the different classes, and printed in the form of a detailed course for the use of the teachers as a helpful guide in this work.

LANGUAGE WORK FOR PRIMARY GRADES.

I. PURPOSE OF LANGUAGE TRAINING.
II. MATERIAL FOR LANGUAGE LESSONS.
III. WRITTEN LANGUAGE.
IV. LANGUAGE FORMS.
V. READING.
VI. POEMS.

Purpose of Language Training.

Thought evolution is the motive in all teaching, no matter what the subject of instruction may be, the teacher's aim is to arouse thought in the child's mind. If each individual teacher has this motive clearly in mind, she will try to select that material and present those conditions which will best make her class think on the subject. The amount of matter presented and the method in which it is presented should be determined by the psychical needs of the child. How much the child already knows upon the subject and how much the teacher can interest him in it will determine how much she can teach him. The apperceptive power of the child must determine both matter and method. Knowledge is made interesting to a child only as it is brought into living relations with something already in his experience, and the teacher who does not consciously or unconsciously observe these laws of apperception is in danger of forcing upon the child uninteresting, formal things, which to him are not significant, because they are

train children to know when they do not know the correct form, to train them to find the correct form before they attempt to use it. This takes time and great skill, but how much better for a teacher to use her time in helping a child to find and use the correct form rather than in making corrections after the child has made mistakes. How much more economical to expend energy in doing rather than undoing? It is high art to reduce mistakes to the minimum; of course the pupils will make some, but these should always be corrected. If we could move forward all the time through correct forms of expression our progress would be greater, even though our rate of motion were slower. We constantly lose time by going backward to correct things which should have been correctly done the first time. When we work for the habit of good English, we realize the immense economy of careful, accurate, thoughtful work. Teacher's time is often wasted in correcting mistakes, made through carelessness, trained into pupils; when by training them into the habit of accurate, careful work, most of this drudgery might be saved. It is the close application necessary for the doing of careful, accurate work that develops power in the child. The results aimed at in language training are power to think and power to express thought clearly and forcibly in correct language.

MATERIAL FOR LANGUAGE LESSONS.

I. STORIES. { From History. Fables. Myths.

II. SCIENCE. { Geography. Physiology. Plant Work. Animal Work. Mineral Work.

III. FORM STUDY.

IV. PICTURES.

V. POEMS.

The Story.

The learning of oral language precedes the learning of written language, and a child's vocabulary of oral words is always larger than that of printed forms. Children seem to learn to talk very easily and rapidly; they learn it naturally, and the same method should be used in the oral language work of the school. The little child learns to talk because he has something which he wants to say; this desire to express himself is the stimulus which impels him to talk. The child in school should have abundant opportunities to talk upon subjects about which he can think and in which he is interested. The first condition of good oral language is to supply attractive material for thought.

Most of the language work of the first year must necessarily be oral. Its subject matter must be calculated to arouse and hold the interest to the child, and in order to do this, it must be entirely in harmony with the child's mental life at this time. The material selected for these lessons includes the story, elementary geography and science, the study of his own body and its care, the study of geometrical forms, pictures and poems. Oral language is more easily moulded than written, and for this reason it is more economical to correct errors in the oral expression and thus prevent their being made in the written. The habitual mistakes which children have acquired by imitation must be dropped and the correct habit formed. Carerul attention should be given to the oral language used by pupils in all recitations.

In the oral language work, in the lower grades, children should not only be trained in the use of single sentences, but opportunities for connected thinking, and its expression in connected sentences should be given. This composition in oral language prepares for and leads directly into written composition. One reason for the difficulties often met with in the latter work is, that children have not been prepared for it in the oral language lessons. The oral language must furnish opportunity for connected discourse, and for this reason the story is given an important place.

THE STORY.

All children are fond of good stories; they never tire of listening to them; they delight in telling them over and over again. The good story is one which furnishes material for the imagination, it must also contain germ thoughts of truth. Great care is needed in the selection of these stories for language work. In our use of the story we have found

Dr. Chas. DeGarmo's Analyses very helpful, and so have adopted his method.

PLAN FOR THE USE OF A STORY.

I. PREPARATION of the child's mind for the thought to be presented in the sfory. By this is meant that preliminary work done by the teacher to prepare the mind for a ready assimilation of the new knowledge which she is abont to give. This is done by skillfnl questioning, thus bringing to the threshold of the child's consciousness a large number of concepts which are related to those soon to be presented. This is one of the secrets of rapid, pleasant and secure learning. These concepts reach out like so many spiritual arms, and draw into living relations to themselves the relative new concepts. In order to do this, the teacher must determine what concepts she wishes to recall in the child's mind, and also in what order she wishes to recall them. They must be recalled in logical connection if they are to be of the most use in assimilating the new knowledge.

This preparation should be made before the new thought is presented ; this avoids confusion of thought and prevents lack of interest in the new when it is presented. A foreshadowing of what is to come may, however, lead to increased interest.

This preparation should be so extended as to cover the whole story, or such a part of it as is in itself a methodical whole. This saves tiresome explanation after the story is begun.

The best form which this preparation can take is that of question and answer. There should be a free exchan5e of thought between teachers and pupils.

II. PRESENTATION.—The story should be divided

into sections, and each section completed before another is taken up. It is necessary to give frequent halting places in order that the mind may absorb what has been taken on. Each section must be worked through and finished up as to apperception, abstraction and application, before the next is attempted.

The teacher should present the story in the language of the story itself; this is no place for rambling discourse. After the story has been presented the children are asked to reproduce it, a discussion then follows in which omissions are supplied, mistakes corrected, and any false conceptions corrected.

A pupil should be allowed and required to recite the section assigned to him as a connected whole. He must continue undisturbed to the end, after which faults may be amended. The continuity of the thinking should not be broken.

When pupils reproduce a section, they must be held to two things: correct language and logical continuity of thought. It is of the utmost consequence that they be trained into the habit of connected thinking. No one can talk connectedly who does not think connectedly.

Constant repetition of stories and parts of stories is an absolute necessity. The pupils are acquiring a body of correct language which is to serve as a basis for facility, correctness and logical coherence in the expression of thought. Without constant repetition these ends cannot be reached.

III. ABSTRACTION.—An act of learning is made up of three processes: the first is to receive new concepts, the second is to arrange co-ordinate, and associate these new concepts with the old ones. This is the process which enables the mind to digest or assimilate the new matter; it is

called apperception. The third process is the derivation of the vital notions or truths lying dormant in the matter learned. This process is abstraction ; the notions are there, they must be drawn out. This work of abstraction must be done by the pupil ; he must think for himself, with the teacher's aid, rather than to have ready-made thoughts supplied him. The teacher should count no time lost which must be taken in order that the mind of the child should produce its own thought on the subject. Socrates walked the streets of Athens, helping minds to give birth to their ideas. The veriest blockhead, probably, has facts enough, all that is lacking is the power to abstract the truths lying latent in what he knows. Only those general truths which are of importance and significant to the child should be derived.

IV. APPLICATION.—After these truths have been abstracted they should be expressed in good language and then applied. The value of knowledge for a pupil is measured by his ability to make it serve the needs of life. Exact knowledge should lead to energetic doing. The story should be a means of character building.

This work with stories is continued through the first three years. In the first grade the work is largely oral ; in the second grade the story is used as a basis for reading and written language lessons, as well as for oral language; in the third grade the story is developed orally and then reproduced in the form of a written composition. As it requires time to treat a story, as here indicated, it is not expected that more than one story each month shall be given, and for some even more time will be necessary. The stories selected are of permanent interest to children, instead of being a mere husk after having been once told ; the interest grows as the work progresses. These stories are

intended to serve as gathering points around which the child groups many of his own experiences. They are centers of interest intended to be used in organization of the child's knowledge. Many of the lessons in elementary geography and natural science, as well as in numbers, drawing and reading, may be made to grow directly out of these stories. The story work may be a great means of unifying and co-ordinating the work in all the branches, and nothing is more desirable than such "concentration."

In the selection of these stories, great care has been taken. Each story is intended to stand for the life of the race in a certain period of its development. It is intended to show how the people lived, what they did, and what they thought. These stories are in themselves organically related; each one is an essential link in the chain of history. It is because of what these stories are in themselves that they are so prolific; they lead into everything and everything grows out of them. The children must, if they are well taught, become progressively interested in them.

These stories are intended to awaken the child's interest in everything about him, to help him understand what is through—what has been. The now and the then are constantly compared, and the contrast alone is a powerful stimulus to mental action.

In the use of these stories, care must be taken to select only those facts which the child can comprehend. Only such facts as he can appreciate are significant to him. This process of giving significance to facts by relating them to what the child already knows is the key-note to teaching. When the teacher recognizes this apperceptive process, and thus looks at the work from the internal standpoint of what the child needs and can take, the child will guide her to the proper selection of facts.

The original intention was to introduce the American history stories, after the stories of the Esquimaux and Indians, but the work done in the Training School during the past year has shown that Jane Andrews' stories, in "Ten Boys who Lived on the Road from Long Ago to Now," are not only preferable, but even better adapted to the younger children.

Agoonack, the little Esquimau sister, is of perennial interest to all young children. She represents life under very simple conditions. This little girl oddly dressed in bearskins, eating raw meat and drinking the milk of the reindeer; riding over the snow in her sled, made of walrus bones, and drawn by dogs, is a source of constantly increasing interest and pleasure. Her life is so simple that a very young child can understand it. He likes to make pictures of her sled and her snow house; to tell number stories about her dogs and the bears her father catches; to read about her birdskin socks and bearskin hood. This story illustrates life in very ancient times. The Esquimaux are to-day, probably, the sole survivors of the cave-men who inhabited Europe during the Glacial period.

Hiawatha, the little Indian boy, living in a wigwam, rocked in a cradle made of twigs and lined with moss, learning to use a bow and arrow, killing a deer and having his coat made of its skin, is a source of never failing interest. He is a type of life in barbarism. This Indian, knowing how to cook food and make baskets and pottery, with his bow and arrow, and stone implements for the cultivation of corn, represents a higher state of civilization than that of the Esquimau.

Kablu, the Ayran boy, living in a house built of logs, wearing clothing made of woven cloth, tending the sheep and cows (domesticated animals), helping to plow and to grind grain, is the type of the man who begins to think.

Darius, the Persian boy, learning "to shoot with the bow, to ride and to speak the truth;" living in a great city, with walls and gates and palaces and temples, gives us a picture of the beginning of civilization proper when people began to carve hieroglyphics and to make written records.

Cleon, the Greek boy, learning to run swiftly and to wrestle, taking part in the great Olympic games, seeing the great statue of Zeus, having his slave pedagogue to lead him, furnishes abundant material for the child's imagination.

Horatius, the Roman boy, going with his father to the Forum, where his father buys him a teacher; going with his sister to the temple, to see her light the fire of Vesta: going to school, where they played court to train the boys to declaim; attending the great May festival in the Campus Martius, gives us a picture of life in Rome about the opening of the Christian Era.

Christopher Columbus, watching the ships from his home near the sea; attending pay school before the days of free schools; seeing books which had just been printed by that new invention—the printing press; making and studying maps; begging for money to carry out his plans, and being helped by Queen Isabella, making that wonderful voyage across the Atlantic in sailing vessels, because there were as yet no steamers, presents a picture of life in the fifteenth century.

The May Flower, with its little band of Pilgrims in search of a home, making that memorable one hundred and three-day voyage across the Atlantic, landing these people in the middle of December on a bleak, uninhabited shore, is a picture of more than ordinary interest. These Pilgrims cutting down trees and building houses, being pro-

tected from the Indians by Miles Standish and his little army, and finally celebrating their first Thanksgiving, show early life in New England.

Capt. John Smith, the hero of Virginia, helping to found Jamestown, living among the Indians, exploring and making maps of the country, is a picture of Colonial life in Virginia in the seventeenth century.

Benjamin Franklin, the one chosen from a family of seventeen children to be educated that he might preach; taken from school because of expense and put into the shop to help make candles and soap, afterwards apprenticed to his brother to learn printing, and finally entering Philadelphia as a poor runaway without either money or friends, presents an interesting story of boyhood. This same boy, with his great fondness for books and reading, and his untiring industry, buying one of the first printing presses in Philadelphia, printing his Poor Richard's Almanac, inventing his Franklin stove, flying his kite in the discovery that lightning is electricity, founding the first public library in this country, and finally honored the world over as the Great Doctor Franklin, stands out as one of the two most conspicuous Americans in the eighteenth century.

George Washington, working so carefully over his number and language books, living in the woods among the Indians while he surveyed Lord Fairfax's plantation, taking his long journey through the wilderness to carry a letter for the Governor of Virginia, taking command of the Continental army at Cambridge, after the war, living on his plantation among his slaves at Mt. Vernon, stands out as the other great central figure of the Revolutionary period.

Robert Fulton, the ingenious boy who made his own lead pencils and fire crackers, contriving paddle-wheels to turn with cranks to propel his flat fishing boat, and after-

wards inventing the first steamboat, stands out as one of the great inventors and serves to interest the children in the progress of invention.

Samuel B. Morse, receiving messages from his teacher through her rattan telegraph, trying to invent a pump, becoming possessed with the idea of sending long distance messages by electricity, buying up all the bonnet wire in the market to use in his experiments, struggling with poverty and discouragement, finally successful in the invention of the telegraph, stands out as another type of a boy who made something—his name stands for one of the great inventions.

Abraham Lincoln, living in the backwoods of Indiana in a half-faced camp, sleeping in the loft on a bag of dried leaves, walking nine miles to school, writing letters for his neighbors who could not write, working as a hired hand and being in great demand because of his strength and willingness, devoting his evenings to books and ciphering, splitting rails to buy a pair of trousers, burning with indignation at the sight of negroes whipped and sold, clerking in a store and studying grammar, is a character whose life is full of interest and morally suggestive.

James A. Garfield, in his struggles to obtain an education, boarding himself, working at carpentering out of school hours, acting as janitor, going to school and teaching at the same time, is the type of what an American boy who is inclined to help himself can do.

These history stories afford great opportunities for giving the children conduct concept, they are the material for the most fruitful kind of moral instruction.

HISTORY STORIES.

First Grade.

AGOONACK, the litte Esquimaux girl.
HIAWATHA, the little Indian boy.
KABLU, the Ayran boy.
DARIUS, the Persian boy.

Second Grade.

REVIEW first grade work.
CLEON, the Greek boy.
HORATIUS, the Roman boy.
COLUMBUS, the Italian boy.

Third Grade.

MILES STANDISH and the May-Flower.
JOHN SMITH.
BENJAMIN FRANKLIN.
GEORGE WASHINGTON.
ROBERT FULTON.
SAMUEL MORSE.

Fourth Grade.

The work of the preceding grades is reviewed and supplemented in the reading of "Stories of American History" and "Ten Boys on the Road from Long Ago." It should be continued in this grade with stories of

ABRAHAM LINCOLN,
JAMES A. GARFIELD.

The material for these stories will be found in Jane Andrews' "Seven Little Sisters," and "Ten Boys on Road from Long Ago to Now," also in Dodge's "Stories of American History," and Eggleston's "First Book in American History," copies of which are supplied to teachers.

Science.

Elementary Science has already taken its place as a part of the regular work in the primary schools of to-day. Its importance as a thought study is recognized, its value as a basis for much of the work in reading, numbers, drawing and language is established. In this science work, its purpose must be kept clearly in mind by the teacher, the child is to be trained to observe closely and then to express in good English just what he sees. This work not only furnishes the child with much valuable information, but its chief purpose is to train him to observe and compare and then express the results of his observations and comparisons accurately and correctly. These science lessons furnish material for oral language lessons, and these oral lessons are followed by reading and written language. The subjects for science lessons are suggested in the detailed courses in Elementary Geography and Physiology and in the outlines in plant, animal and mineral studies, given from month to month in the grade meetings.

Form Study.

The form study in the first and second grades affords fruitful material for language training. As the forms to be observed are definite and demand accuracy of expression in description and comparison, and as all inaccuracies of statement can be easily detected, no study furnishes a better basis for language training. The test of the pupil's observation is the accuracy of his expression; form study furnishes opportunity for exact seeing and exact expression.

Pictures.

Pictures may be used to advantage in the language work of almost every grade; their value, as a means of stimulating thought and cultivating expression, is not fully appreciated. They awaken interest, and, to the young mind, often convey thoughts which cannot be given through the printed forms. With a little effort, a teacher may make a collection of pictures which will prove valuable subjects for language lessons; and helpful aids in the geography, science, number and other lessons. The pictures first used should be very simple; a child sometimes fails to be interested in a picture because it is too complex, it contains too many objects, and suggests too many relations; he cannot read the thought in it. A child, who has been trained to *read* pictures, gets much from the illustrations in his books that the child without such training cannot get. We should not expect children to read pictures without being taught to do so any more than we expect them to read the printed page without first learning how.

HOW TO USE A PICTURE.

1. The Picture as a whole:

Place the picture, which has been carefully selected and is large enough for all to see, before the class and let them examine it closely. They should be trained to see it as a whole, and tell what its purpose is or what it represents. To fail to first study the picture, as a whole, and thus get at its unity, is to violate one of our first laws of mental action; the child is not ready to analyze and consider the parts until he has grasped the whole. Aim to secure a variety of expressions about the subject of the picture.

2. The parts of the Picture:

It is often well to select the central figure in a picture and then group all the others around this center. Children must be *trained* to select the essential features first, and these principal features should be first seen and described. Minor details should not be emphasized but relegated to their proper places. After the main parts of the picture have been decided upon, the order in which these parts shall be described must be determined. A good description of a picture is one which makes the listener see the picture as it is. To describe a picture is to rebuild it in the mind of the one who listens. To thus rebuild a picture, careful attention must be given to the proper relation of the parts. These parts must be described in the order of their relation to the whole. To train the child to see clearly the parts in themselves, and in their proper relations to the whole, and then to help him to the best expression of what he sees, is the work of the teacher in this step, and it requires both thought and skill to do this successfully. The teacher must first decide these things in her own study of the picture before she can lead the child to see and tell them. Careful preparation is necessary. The children are led to this analysis of the picture through the teacher's questions. To train a child to rebuild a picture through the use of words is valuable language experience.

3. The whole again:

After the children, by the help of the teacher's questions, have been led to analyze the picture, then let them, in their own words, independently, describe the whole picture. These descriptions may be oral, or, with older pupils, written. When written, they furnish good material for reading lessons. It is always well to have children read what they write: it trains them to criticise their own compositions, and is an aid to natural expression.

4. The picture as a basis for a story:

After the picture has been described, the children may be led to make a story about it. This furnishes opportunity for purely original work, and children take great delight in thus using their imaginations. If, in the beginning, the teacher lends a helping hand through questions, results which are very gratifying may be obtained in this part of the work.

"How to see" contains many valuable suggestions on this work with pictures.

Poems.

Seventy-five per cent of all our children who enter school have left at the age of twelve. If we have taught them how to read we have done well, but if we have also taught them what to read we have done better. That a child should leave school without some discrimination between that which is good and that which is bad in reading matter, is a fact much to be deplored. Our aim should be to give him a basis for future reading, and this can be done partly through our work in literature. The strongest plea for this work in the primary grades is the fact that so small a proportion of our children ever reach the higher grades. There is no benefit from reading unless the reading matter is good, and this cultivation of a taste for good reading is an important part of our work. "The ability and disposition to read good books is the greatest blessing the common school can give." Although there is not a great deal in literature that the children in our lower grades can read, yet there is a great deal that they can enjoy if it is read to them, and after learning one or two selections from some favorite author, the teacher can supplement this by reading other selections from the same author.

One poem may be the means of making him want to read the work of its author. "All moral ideas are portrayed in literature in such a form as to attract the child toward good, and to arouse his antipathy to the bad. The chief defect in our present system seems to lie in the feebleness of its influence upon the ideals of the child." Choice selections from the best authors should be committed to memory by pupils of all grades.

The value of committing to memory choice selections, as a means of language training, can hardly be overestimated. These poems are models of what is best in thought and expression, and when they are once lodged in the mind of a child they must influence him. How often we find our children unconsciously using an expression from some poem they have learned to like. "Teachers can do no better service for their pupils than to make the study of choice selections from the writings of our best authors a prominent part of the language training of the school."

Children should study the poem and get the thought in it before they commit it to memory. This work can best be done by means of good questions by the teacher. It is a good exercise to have the pupils give the thought of the poem in their own language. When a poem has once been learned it should not be forgotten; keep up constant reviews in this work. A familiar poem is a source of pleasure. It is difficult to estimate the value of a good poem when once it is lodged in the mind and understanding of a child.

In this work with poems, the thought of the poem may furnish the best of material for reading lessons in the lower grades, and for composition in the third and fourth grade.

Any of the poems may be cut when the teacher's best judgment so dictates; care should be used in so doing.

First Grade.

THREE BUGS, - - - - - Alice Cary.
TO MOTHER FAIRIE, - - - Alice Cary.
OBEDIENCE, - - - - - Phoebe Cary.
THE BROWN THRUSH, - - - Lucy Larcom.
SONG OF HIAWATHA, - Henry W. Longfellow.

In connection with the learning of their poems, tell the children the beautiful story of the early lives of the Cary sisters.

Less attention is given to the poem and more to the story in this grade. The selections from Hiawatha are intended to be read by the teacher, in connection with the story of the Indian Boy.

Second Grade.

NOVEMBER, - - - - - Alice Cary.
TAKE CARE, - - - - Alice Cary.
BAREFOOT BOY, - - - - John G. Whittier.
ROBERT OF LINCOLN, - - William C. Bryant.
THANKSGIVING DAY, - - - L. Maria Child.
FIRST SNOW FALL, - - - James R. Lowell.
THE MOUNTAIN AND THE SQUIRREL, Ralph W. Emerson.
CALLING THE VIOLET, - - - Lucy Larcom.
THE CHILDREN'S HOUR, - Henry W. Longfellow.

Third Grade.

DON'T GIVE UP, - - - - Phoebe Cary.
RED RIDING HOOD, - John Greenleaf Whittier.
IN SCHOOL DAYS, - - John Greenleaf Whittier.
THE FOUNTAIN, - - James Russell Lowell.
DUTY, - - - - Ralph Waldo Emerson.
THE OLD MAN'S DREAM, - Oliver Wendell Holmes.
MILES STANDISH, - - Henry W. Longfellow.
SAILING OF THE MAY-FLOWER, Henry W. Longfellow.
VILLAGE BLACKSMITH, - Henry W. Longfellow.

Fourth Grade.

THE CORN SONG, -	John Greenleaf Whittier.
THE SINGER, - -	John Greenleaf Whittier.
MARCH, - - - -	William C. Bryant.
PAUL REVERE'S RIDE, -	Henry W. Longfellow.
CHILDREN, - - -	Henry W. Longfellow.
THE BROOK AND THE WAVE,	Henry W. Longfellow.
GRADATION, - - - -	J. G. Holland.
BARBARA FRIETCHIE, - -	John G. Whittier.

Make a special study of Paul Revere's Ride; use it in connection with the Revolutionary period in the Stories of American History, also the Study of Boston in Geography.

WRITTEN LANGUAGE.

1. Copying Sentences.
2. Dictation.
3. Composition.
   - (1) Narration.
   - (2) Letter Writing.
   - (3) Description.
   - (4) Comparison.

Copying.

A child should be trained to write correct English automatically; to do this, he must have much practice in written expression. This work is started early in the first year, in the form of copying short, simple script sentences from the blackboard. The copy given should be a model of good work, and the child should be trained to use the utmost care in copying. Capitalization and punctuation are taught by imitation in this work of copying. Children should read orally what they have written.

Dictation.

Dictation lacks the healthy stimulus of original thought, and yet the dictation exercise has its place as a valuable aid in language training. It furnishes the opportunity to use words and idioms which the children do not ordinarily use in their conversation and composition. These words and idioms thus used in the dictation exercises become familiar to them and thus make their way into the child's vocabulary. It is one thing to understand

the meaning of a word or idiom, but it is quite another thing to use that word or idiom in every day conversation. The aim is to make the child's vocabulary available to him for talking and writing as well as for listening and reading.

The sentences used in dictation should be models in both form and content; in as far as possible, each sentence should contain some valuable fact; it should also furnish the occasion for the correct use of some new word or idiom. These exercises are also meant to teach punctuation, capitalization and spelling.

A DICTATION LESSON.

1. Teacher has the lesson carefully written on the blackboard. This lesson is usually an outgrowth of a previous word-work lesson in which the new words for the day have been developed. The lesson contains these new words together with any new idiom she may wish to present. This lesson on the board should be read and understood by the pupils before being used for dictation.

2. The lesson on the board is copied by the children. Absolute precision and correctness in copying is the first point to be gained. Children have an innate taste for precision, and this should be cultivated by doing perfect work, rather than destroyed by negligent training. The delight of doing good work is a great satisfaction and charm to the normal child. The skillful teacher is the one who can reduce pupils' mistakes to the minimum. In this work of copying, the only occasion for mistakes is made through carelessness. Children respect a teacher who trains them in accurate habits.

3. The lesson on the board is now covered over, and the sentences, as dictated, written by the pupils. The

sentences should be spoken but once; train the children to listen.

4. The curtain is drawn back and the work is corrected by reference to the work on the board. It is best to have the pupils make their own corrections. If the teaching is good, there will not be many errors to correct, and pupils can be trained to do this work without its consuming too much time. The corrections should be understood by the pupils, and they should be made at this time while the correct form is before them and their attention is being given to this work. The lesson is not finished until the errors of every child are corrected. This combination of the spelling lesson, with the dictation work in language, is an economical arrangement.

Composition.

Composition differs from either copying or writing from dictation, inasmuch as the thought expressed and the language in which it is dressed are the child's own. This work is begun by the writing of original sentences, continued in the writing of paragraphs, and culminates in the expression of a body of organized thought in the form of a composition.

The psychological basis for an original sentence is a judgment. An original sentence is the expression of one of the child's own thoughts, and original composition must be based upon thought work. The difficulties met with in composition work often grow out of the fact that children have not been trained to think, rather than that they cannot write. The first step in all composition writing is to develop thought, and this fact indicates very clearly another fact, namely, that the written composition work should grow out of the thought studies; instead of being a separate study in itself, it should be a part of all lessons in

which thought is developed. The story, reading, form, science and geography lessons furnish the material for the composition work. Until our children write, write a great deal, and write what they have already thought, our composition work will be unsatisfactory. When written composition is made a part of every lesson in which thought is developed, when children write under the stimulus of a desire to say what they think, when expression is used to intensify thought and thought is completed in expression, then we may begin to look for the *power* of expression.

This work with the original sentence should be started in the first year, and in the second, children should show some degree of skill in this work. After the children have had a lesson about the cube or cylinder, let them write about it; after they have observed a leaf or flower, let them write about it; after they have read or heard a story, let them write about it. Give daily work in the writing of original sentences. In order to stimulate logical thought, and thus secure logical sequence in these written sentences, it is often well to have these sentences written in answer to questions given by the teacher. Children must be trained to think logically, and this requires the help of the teacher. The child's thought must be directed.

In the second and third grades it is well to have this work done under the direction of the teacher rather than for seat-work, because the pupils have to be watched with the greatest care in order to avoid mistakes. When pupils need a word or other form of writing, train them to ask for it, then write it upon the blackboard. List of words continually in use may be kept upon the blackboard. If this first work is carefully done, pupils will learn to do this work independently in the higher grades,

The psychological basis for a paragraph is a group of

related thoughts. As soon as children have mastered the writing of single sentences, they are ready to begin the writing of paragraphs. Much attention should be given to this work on the paragraph in the B Third class. Each section in the story work furnishes material for a paragraph. After a section has been developed, the written work should follow, and the written productions of the sections in paragraphs, when combined, will form a composition proper. In the work upon the paragraph, the teacher's aid may be given in the form of logical questions, and in the work with the composition it is always well, in the third and fourth grades, to follow an outline. This outline serves as a guide to composition, and helps to fix the continuity of thought. They may finally be led to make their own outlines, and work more independently in the upper grades. In order to secure a good composition on any subject, the teacher must not only develop a body of thought in the child's mind, but she must so organize that thought that it will naturally take expression in logically related paragraphs.

SUGGESTIONS FOR THE FORM OF A COMPOSITION.

1. Have pupils' names written in upper right hand corner of page.

2. Have the title written in the center of the page and underlined.

3. Indent the first line of every paragraph.

4. Preserve a margin at the left of every page.

5. Fill out each line at the right of page; give careful attention at the division of words when the line will not hold the whole word.

6. Spell, punctuate and capitalize correctly.

7. Penmanship should be the pupils' best.

To secure correct form in this composition work is easier than to secure accurate thought and the correct use of language. When a child makes an inaccurate statement, the thought in his mind must be made clear; when he fails in his choice or use of language, he must be helped to the best form by the teacher or other pupils. A few exercises read and carefully corrected with the class will prove more helpful to the children than many exercises corrected out of school by the teacher. The pupils should be trained to closely examine and carefully criticize these exercises, and, when able, they should give reasons for changes suggested. A few minutes *every* day, given to work of this kind, will accomplish more than hours given by the teacher alone to the examination and marking of papers.

In this work, aim for rapidity, as well as accuracy and precision. Rapid writing facilitates clear thinking; practice gives skill. To express one's self rapidly in good English is the best result of language training.

Letter writing is an essential part of composition; the correct form of letter writing, as well as the different styles of letters, should be taught. This work is started in the A Third class and continued through the fourth grades. As in other forms of composition, the child should have something to write about.

A description is a word picture. Descriptions of objects and places form an essential part of written and oral language work. This work in description is a part of the work in all the grades. In describing an object, children must be led to select the essential points and describe them in their proper relation to the whole. They must not only select the essential points, but all the essentials must be selected or the description is incomplete. These essential

points must be described in proper order or the parts of the picture will not be properly related. For valuable suggestions on this subject consult "How to Talk," pp. 13–16, pp. 42–45, pp. 51–56, pp. 96–104; also "How to Write," pp. 75–115.

"Comparisons are at the bottom of all thinking." It is by comparison that we find out the difference between things, also the likenesses; it is by comparison that we find the general features of things. Without comparison we could never get beyond disconnected facts. "The art of thinking can be acquired by comparing more rapidly than in any other way." Much valuable work in language, both oral and written, can be done in the comparison of forms, plants, animals, rivers, cities, etc. For valuable suggestions consult "How to Talk," pp. 180–190, and "How to Write," pp. 190–229.

In the work of the fourth grades, the composition work grows directly out of the geography, history and other thought studies. About three lessons a week are to be devoted to this written work.

Language Forms.

A knowledge of forms, their meanings and their uses, is essential to an intelligent and correct use of language. A specific training in these forms is necessary in order to secure the needed precision, force and variety in expression. It is mostly in connection with written work that this formal side of language training should be given. An idiom is the framework of a sentence, and an important part of language teaching is to give the children the use of the different idioms of the English language. They must first see clearly the idea or relation which an idiom expresses, and then have abundant practice in the correct use of this idiom to express this idea or relation. After a

child sees clearly, he must be *helped* to the verbal expression of what he sees. Children often fail in the expression because they are not familiar with the form for the expression of what is understood. A child needs a vocabulary of English idioms just as he needs a vocabulary of English words, and careful work should be done in each of the lower grades in giving him these requisite idioms for thought expression. This work with idioms is one of the best means of securing variety of expression, and overcoming that sameness which arises from the constant repetition of the same forms of expression. Instead of being a study of bare forms, this work should be so connected with the form, science and story work of the grade that it becomes both attractive and interesting. The sentences should have both form and content, and as the content increases in interest the form is more easily fixed. In this, as in all work, interest saves time and repetition, and to interest children is the most economical as well as the best way of teaching them. A child should first master the simple sentence, then the complex sentence, and the next step is to the paragraph and composition proper.

Inasmuch, however, as the simple sentence is the unit of all expression, this work on idioms or the frame work of sentences is very important. These sentence exercises are the art and not the science of the English language; they are to furnish the child the opportunity to use the idioms of the language; to give him a "language experience instead of presupposing one that he does not have."

In this work, the teacher must often supply the necessary idiom for the proper expression of the thought presented, just as she gives the word for the idea which the child has. Children think ideas and relations, but the words and idioms for the expression of these ideas and re-

lations are arbitrary and must be obtained in some way from others. Time is often lost because the teacher fails to supply promptly the proper form for the expression of what the child wants to tell. A new idiom should be presented in the oral form first, and afterwards in the written. It is important that each idiom be associated with the *exact* thought which it expresses, so that in getting and giving thought through language there will be accuracy and precision.

Powell's "How to See" will prove a helpful book to teachers in this connection.

B Class--First Grade.

I have a ——.
You have a ——.
He has a ——.
I see a ——.
You see a ——.
He sees a ——.
See the ——.
Do you see the ——? Yes, I see the ——.
Does he see the ——? Yes, he sees the ——.
We have a ——.
They have a ——.
We see a ——.
They see a ——.
Have they a ——? No, they have not a ——.
This is a ——.
Is this a ——? Yes this is a ——.
This is a ——.
Is that a ——? No, that is a ——.
This is a —— and that is a ——.
It is a ——.
Is that a ——? No, it is a ——.
Where is a ——? Here is a ——.

Where is a ——! There is a ——.
Where are the ——? Here are some ——.
Where is the ——? The —— is —— the ——.
I have a —— and a ——.
I see a —— and a ——.
See the —— and the ——.
Can a boy ——? A boy can ——.
A boy can —— and ——.
Has a —— a ——? A —— has a ——.
Have —— ——? —— have ——.
Will a ——? Yes, a —— will ——.
Is this —— ——? This —— is ——.
Is that —— ——? That —— is ——.
What is this? This is a ——
What are these? These are ——.
What is that? That is a ——.
What are those? Those are ——.
These are —— and those are ——.
Do you like to ——? Yes, I like to ——.
I like to —— and ——.
Let me see the ——.
Let me hear the — —.
Let me see ——.

This work with idioms in this grade is to take in the oral form and should precede the beginning of the learning to read.

A Class--First Grade.

Singular and plural forms:

The dog barks.
The dogs bark.

Interrogative form:

Does the bud open?
Do the buds open?

Progressive form:

The tree is growing.
Are the flowers growing?

Passive form,

The floor was cleaned.
Were the windows washed?

Predicate adjective:

The sky is clear.
Are the clouds black?

Noun attribute:

A horse is an animal.
Are flies animals?

Object:

Plants drink water.
Do plants breathe air?

The children in this grade should have abundant practice in making sentences after each of the above models, so that they may become familiar with these forms of sentence structure.

Teach the use of after, before, as soon as, where, while and but.

Teach the use of capital letter at the beginning of a sentence, and the period or interrogation point at the end of a sentence.

In this grade and the ones higher this work with idioms can be closely connected with the word-work. Use the idioms here given in the sentences given for dictation in spelling, If the teacher has clearly in mind the idioms to be taught, she can furnish occasion for their use in all the lessons.

B Class--Second Grade.

Comparison of adjectives:

Detroit is a large city.
Chicago is larger than Detroit.
New York is our largest city.

Compound subject:

Animals and plants grow.
The leaf and the flower grow on the same stem.

Compound predicate:

An animal eats and drinks.
Animals live and grow.

Compound object:

Plants need heat and light.
Do they need air and moisture?

Give special attention to the comparison of adjectives, using the different forms in abundant original sentences.

Teach the use of which with each of the following: to, from, with, for, on, at, in, before, after and about.

Teach use of period or interrogation point at end of sentence.

Use of capital letters at beginning of sentence, also in writing names of persons.

A Class--Second Grade.

Review work of preceding class.

Pronouns, three persons, singular and plural:

I can read. We can read.
You can read. You can read.
He can read. They can read.

Passive form, singular and plural :

I am taught.
You are taught.
He is taught, etc.

Progressive form, singular and plural:

I am writing.
You are writing.
He is writing, etc.

Predicate adjective, singular and plural:

I am happy.
You are happy.
He is happy, etc.

Use of whom with each of the following: to from, with, for, in, after, before and about.

Use of comma before and after the name of a person addressed.

Use of capital in writing the names of the months and the days of the week.

B Class--Third Grade.

Time—present, past and future:

Water freezes.
Water froze last night.
It will freeze to-night.

Passive form—present, past and future:

The water is frozen.
The water was frozen.
It will be frozen.

Subject modified by adjective:

That new leaf is small.

Subject modified by phrase:

That leaf of the horse-chestnut is compound.

Verb modified by phrase;

That leaf came out of the bud.

Abbreviations—Mr., Mrs. and St.

Teach use of is and are; also was and were.

A Class--Third Grade.

Review all previous work.

Teach use of has or have to show the completion of an action at the present time.

Use of had to show the completion of an action at a past time.

Single and plural forms:

Chair, chairs—add s to singular.
Box, boxes—add es to singular.
Man, men—internal change.

Abbreviations—A. M., P. M. Av., P. O., cts. and doz.

Use of present participle:

The book lying on the table is mine.

Use of adverb of manner:

He walks slowly.

Comparative forms of adverbs.

Common contractions—it's, can't, don't, etc.

Possessive case of singular nouns, in which the apostrophe precedes the s.

Simple use of quotation marks.

How to write dates.

Use of capital letter in writing names of cities and streets.

B Class--Fourth Grade.

Simple use of quotation marks.

Simple form for letter.

Possessive forms of plural nouns ending in s.

Hyde's Practical Lessons in English, lesson I. to XXV., inclusive.

A Class--Fourth Grade.

Review work of preceding grade.

Possessive forms, singular and plural nouns. Avoid special difficulties.

Copy Paul Revere's Ride, noticing that it is divided into stanzas, and that the first word of every line begins with a capital.

Hyde's Practical Lessons in English, No. 1, Part I., completed.

READING.

The results in this branch have been more satisfactory this year than the preceding one for several reasons.

The introduction of free text books has given us a much more generous supply of better reading matter than we have heretofore had. Instead of reading one book, our children have been able to read many books in the same time, and this increase in the amount of reading done has meant increased skill in the power to read. A child can read many books each year if he only has access to those which are adapted to his stage of advancement. In teaching children to read it is better to have them read much of more simple reading matter than to have them read less of more difficult matter. The aim is to make rapid readers of our children, and in order to form the habit of reading rapidly they must have, while learning to read, reading matter which they can read rapidly.

The quality of the reading matter offered has much to do with the progress made by the pupils. The more interesting the subject matter, the greater the pupils' desire to read it, and this desire to know what the book says is the strongest stimulus which can be brought to the child's assistance in the difficult process of learning to read. Our historical, geographical and science readers have, on the whole, proved more interesting to the children than the ordinary, first, second and third readers. Every page of

reading matter given to a child should contain something in which he is interested, and about which he wants to know.

Not only have we had a larger supply of better reading matter during the past year, but the methods employed in the teaching of this subject have been more in accord with educational principles and the mental laws governing the child's growth in this direction. Good results in teaching can only come through the intelligent application of, and conformity to, the laws which determine mind growth and development. Skill on the part of the teacher implies knowledge of these things; and, along with our generous supply of good reading matter, we must have teachers who know child nature and how to best use this material in its development. Intelligence on the part of the teacher is an absolute essential to economical and skillful work in our school rooms.

A third factor in the case is the fact that more time has been given to this subject of reading in our schools during the past year; not that anything else has been neglected, but the reading has been made a part of all the thought lessons, a mode of thinking about number, form, geography and history, and this unification of the work has proved an economical way of developing the desired power to think through the medium of printed language.

The results in Reading in our Primary Schools are yet unsatisfactory, the work attempted in four years should be accomplished in three, and we hope through increased skill on the part of our teachers, and increased interest in the work on the part of our pupils, through its better adaptation to their needs, to attain to better results in this direction. Not only should the work be done in less time, but the results should be better in quality, the

children should read more easily and more fluently, as power increases the amount of effort required diminishes. The accomplishing of the desired results with the least expenditure of power is the end aimed at in the work.

Close observation dnring the past year has led me to the thought that we have required too much of the children in the B Class First Grade in this matter of learning to read. Better results can be attained in the end by not forcing this work with these little beginners, and for this reason the change made in the Course of Study for the work of this class was suggested. To know fewer words thoroughly, to be able to read them rapidly and to like to read is a better foundation for the work in the next class than the acquiring of a larger vocabulary with different habits and feelings.

The matter of silent reading has been emphasized with good results. We believe this taking of the thought from the printed page through the eye to be the fundamental process in reading. That which is in itself of greatest practical value to the child and that which at the same time furnishes the only sure foundation for good oral reading. The teaching of the former enables the child to do the latter without much thinking.

I rejoice in the fact that through the work in History, Geography, Literature and Science much is being done in our schools in the way of teaching children what to read and helping them to form a taste for good reading. The ultimate aim of the work is to make our children *habitual* readers of *good* books.

In conclusion allow me to say that the Grade Meetings have been my most potent and effective means of helping and stimulating the teachers and of directing, strengthening and unifying the work. Also to express

to the teachers and principals my heartfelt thanks for their hearty co-operation in the work, and to the Superintendent my gratitude for his hearty support and encouragement and the many valuable and helpful suggestions and directions which he has given me during the year just closed.

Very respectfully submitted,

MATHILDE E. COFFIN.

July 1, 1893.



SUPERVISOR'S REPORT, DRAWING.



REPORT OF THE SUPERVISOR OF DRAWING.

To W. E. Robinson, Superintendent of Schools:

In submitting to you my annual report for the school year ending June, 1893, I am pleased to say that progress characterizes most of the work.

While the year has not been marked by changes in methods, I have found by careful and continued investigation and tests given to pupils that their growth in this work has been steady and healthful.

This growth is shown, first, in the increase of right motive power, that propelling force of the child's faculties which determines the educational value of all instruction. Some one has said, "We may instruct, but we do not always educate." It is this very want engendered within this *desire* for knowledge which means more to the pupil than knowledge itself, that stands out in so many of the grades.

As proof of this, I have found in many of the schools not only the prescribed work for the term well finished, but much supplementary drawing done, as numerous illustrated written exercises in Language, History, Geography, Arithmetic and Composition have found their places in daily schedules.

That power has been gained it is farther evidenced in the ability of pupils in many schools to both generalize and unify; to grasp essentials in expressing common objects; to look for features that give the type form in every object, but still to recognize it as individual; and, finally, by educated habits of judgment, to acquire the restraint necessary to reject the non-essentials.

The work in the Normal class has progressed in equal ratio, receiving a strong impetus, as it does, in many excellent methods of that school.

We are yet in need of individual models and material for color work, as aids in carrying out our complete scheme in the primary grades.

The different kinds of work have been carefully studied by class teachers, and I would especially commend to your consideration their earnest effort and sustained interest, knowing that it is only through the interpretation of the regular teachers that the work of supervision can be successfully carried out,

In closing this report, I would thank you for your helpful and willing counsel at all times, and your unwavering interest in this department.

Respectfully submitted,

MYRA JONES.

Detroit, June 30, 1893.

REPORT OF THE SUPERVISOR OF MUSIC.



REPORT OF SUPERVISOR OF MUSIC.

Mr. W. E. Robinson, Superintendent of Schools, Detroit, Mich.:

MY DEAR SIR:—It is a pleasant duty to hand to you my report for the past year. Never since my connection with the schools have the teachers and pupils accomplished such good work.

We teach music in our public schools not altogether with the idea of creating skilled musicians, but for character and enjoyment, for character is as necessary to a scholar's success and happiness as intellectual ability, and music appeals in a marvelous way to that part of our being called by psychologists the "sensibilities." Thus it has a marked influence upon character.

This past year the teachers who have used supplementary music, have by my direction been careful to use songs written by Mozart, Handel, Schubert, Mendelssohn and other great composers. We have tried very successfully in a number of grades to have pupils commit to memory both words and music so that they may give more attention to expressive singing—that their taste may be improved. We have also studied the National Music in a more systematic manner.

In our country are people from every nation. The nation's strength is reflected in the nation's hymns. How

necessary, then, that we give more attention to our Nationa Music.

There are some teachers who do not feel confidence in their own musical ability sufficient to enable them to carry on the work successfully. *Every* teacher can do some of the essential things toward her pupils' improvement in singing. Among some rules that may be observed by all teachers, especially those who have not much musical ability, are the following:

1. An erect position.
2. A correct management of the breath.
3. Purity of tone.
4. Distinct articulation,
5. Expression.

Thanking you for your hearty co-operation, and thanking the teachers for their support and great help in my work, I am

Yours very sincerely,

EMMA A. THOMAS.

SUPERVISOR'S REPORT, WRITING.

REPORT OF SUPERVISOR OF WRITING.

To Superintendent W. E. Robinson:

This report marks the close of the sixth year of my connection with the schools of this city, and as I look back over these years I can see a steady, careful advancement in the writing. The great obstacles to be overcome have been lack of uniformity and system. Many teachers were tied to the copy-book, and the work they did was slow and labored, others were inclined to use movement exercises, which did little or no good. When the children wrote in copy-books, they worked very slowly, and when they wrote spelling, they wrote rapidly and carelessly. We have labored faithfully to correct these two faults. At times it has seemed to some that we had almost lost sight of the copy-books, and to others that we were too exacting in the miscellaneous writing, but by steadily holding to our purpose and patiently persevering in what we believed to be the right way, we have reached a point where all agree that our system is right and where all feel a just pride in our work.

Much is said nowadays about movement in writing. We are often asked if we teach muscular movement to children. We aim to so interest the child in his work, that he will work enthusiastically. We first place him in the correct position, then put before him the correct form and let him write. By holding him strictly to position and

form, and compelling him to work fast enough, we find but very little need of special drill on movement for movement's sake alone.

The question is often asked, "Do you analyze the letters?" Our plan is to so develop the form so that one letter is the outgrowth of another, and so that the child sees the similarity and the dependence and connection, without any fine-spun analysis.

The thing that has done more to make our writing in primary grades legible, and to lay the foundation for good, rapid, easy writing, is the drill upon the thirteen short letters, two spaces high, in the first eight weeks of the B First Class. It is worth more than any other one thing in the whole course. If the small letter are neglected in the beginning, they will always be weak. They are the foundation and we must insist upon that rule being carried out strictly.

We have several rooms where the desks are too near the seats. It would require but a short time to change these, and it should be done at once. We have been annoyed with poor ink more this year than ever before. The lead pencils and slate pencils have given us no little trouble. Where children furnish themselves they bring in poor material very often, which annoys the teacher and costs the children more in the end than good material.

Our trial of the Spencerian pen, No. 33, has been very satisfactory. It is strong and smooth and makes a good line. We hope that no change will be made in pens. Our motto is, "The best is none too good for us."

Very respectfully submitted,

W. F. LYON.

Department of Physical Culture.



DEPARTMENT OF PHYSICAL CULTURE.

To W. E. Robinson, Superintendent of Schools:

DEAR SIR:—In submitting my third annual report, it gives me pleasure to say that during the past year substantial progress has been made in this department of school work.

Much of this progress is due to the efficiency with which the teachers have directed the exercises. A lesson in gymnastics of from ten to fifteen or twenty minutes duration constitutes a part of the daily program, consequently the exercises being regular and systematic, the pupils derive more benefit from the training.

During the past year a course of study in Physiology and Hygiene was introduced into every grade from the very lowest to the highest. The physiological charts were used in connection with the course and much excellent work was done by the pupils in this study as it was given generally as a language lesson.

Besides the visits to the teachers regularly in their respective rooms, the grade meeting held on Friday afternoon of each week afforded an excellent opportunity to give instructions and directions concerning the theory and work of each month in advance.

It has been our object and aim to train the pupils in an intelligent manner. They do not go through the drills

and exercises blindly but are taught the importance of physical training and are told just what each exercise, faithfully performed, may do for their bodies. The military precision which accompanies the drill enable the pupils to appreciate the meaning and importance of self-control.

While it is not expected that these exercises will cure the sick and deformed or eradicate any abnormal growth of the body, yet we believe that by systematic exercise abnormal growth may be arrested or prevented, and the body preserved and made stronger and more healthful by the observance of the laws of life and health.

Our aim, however, is to benefit the weak as well as the strong. Pupils not able to take the drill as outlined are given only such exercises as we know will benefit them. Every physical defect is noted as far as possible, and carefully considered in directing the work.

STATISTICS.

The following statistics show some of the physical defects as noted during the school year just closed:

Number of pupils having defective vision due to weakness, myopia or presbyopia	459
Number of pupils cross-eyed	89
Number of pupils having cataract or growth on the eye	9
Total number that need attention	557
Number of pupils now wearing glasses	249
Number of pupils who have the use of only one eye	12
Total number with impared vision	818

Number of pupils deaf, due in most cases to scarlet fever or diphtheria	192
Number of pupils having defective speech	150
Number of pupils having curvature of the spine or deformity of body	52
Number of pupils having crippled hands, feet, arms or legs	74
Number of pupils having impaired nervous system, St. Vitus dance or paralysis	111
Number of children having other ailments, as rheumatism, consumption, heart disease, etc., who are excused from exercises	64
Number of children weak-minded	48
Total number of children with physical defects	1,510
Number of children enrolled	29,094
Number of children in normal condition and able to take the exercises	27,584

It has been asked if the pupils do not tire of the drills. On the contrary they love the work and manifest great interest in the various exercises and marching.

It is hoped that during the coming school year more attention can be given to marching exercises, and that in every school pupils will be dismissed from the building in military order to the music of the piano. This has been the custom in many of the schools, and experience proves that the result is a marked improvement in the discipline and order about the building and halls.

The manual or detailed course of study in physical culture is now being revised and will include more advanced work for the upper grades. It gratifies me to report that the teachers have endeavored to faithfully carry out

the order of exercises prepared for them, and have manifested a deep interest in this branch of the school work.

In concluding my report permit me to express my highest appreciation of your kind consideration, advice and hearty co-operation during the year just closed.

Yours respectfully,

NETTIE D. KIMBERLIN.

REPORT OF TRUANT SCHOOL.



REPORT OF TRUANT SCHOOL.

To Supt. W. E. Robinson:

The following report of the Detroit Truant School for the year ending June, 1893, is respectfully submitted:

The enrollment of pupils in the Truant School during the past year has been greater than that of any preceding year since the opening of the school, in 1883. This increased attendance is due to the efficient work of the Truant officers, who are now able to look carefully after the boys reported for truancy, and see that they either attend the public schools or are taken to the Truant school.

A larger number of truants than usual have been picked up in the streets and brought to this school. This, in a great measure, is due to a failure on the part of the principals to report promptly all cases of truancy for investigation by the Truant officers. Frequently boys have been brought to this school who have been truant from two to twelve weeks, and whose parents supposed they were in daily attendance at school. We find it much more difficult to manage this class of boys than those received in the earlier stages of truancy, and it is from this class that we send the boys to the Reform School.

The total enrollment for the school year was 400, of which 370 were boys and 30 girls; 121 were received by transfer from other city schools, and were mostly picked up on the streets by the Truant officers, and 279 were not attending any school. Of the entire enrollment 116 were

in attendance at the close of school, 120 were returned to the city schools, 125 were released to go to work, 32 had left the city, and 7 were sent to the Reform School for truancy.

On account of the severe winter and the great distance many of our boys have to come, our daily attendance falls much below our usual average. Some of our boys come from a distance of between three and four miles, and the officers find many boys whose parents wish to have them in a school of this kind, but the distance is too great for them to walk. I think the time has come when two branch schools should be established—one in the northeastern part, near Gratiot avenue, and the other in the northwestern part, near Michigan avenue.

The work of the Truant officers has been well done, and to their efficiency most of the success of the school is due.

Charles B. Andrews, who had been connected with this work for about seven years, was promoted to a roundsman, and his place filled by W. D. High.

During the year they have made 5,158 visits, and served 464 notices,; 465 truants were reported from the other schools. This ends the tenth year of our work, during which time we have enrolled 2,858 pupils, 152 of which have been sent to the Reform School. More than one-half of these were sent during the first three years, from a class of boys who had been roaming the streets before the establishment of the school. If we can get pupils before the habit of truancy becomes fixed, the number sent to the Reform School will be reduced to a minimum. Many of our earlier pupils are now occupying positions of trust and honor.

M. J. WHITNEY,
Principal.

NORMAL TRAINING SCHOOL REPORT.



REPORT OF THE NORMAL TRAINING SCHOOL.

To Supt. W. E. Robinson:

I submit the following report of the Normal Training School for the year eading June 23d, 1893:

The whole number of students belonging during the year was eighty-eight, thirty-six of whom were graduated from the school.

More have been placed in grammar grades this year than ever before, thus emphasizing the need to which I called your attention in the last report, of upper grades in the practice school, so that the students can be better prepared for grammar grade work. In this connection I will also call your attention again: 1. To the need for a larger building, and more children in each grade. 2. A kindergarten is becoming a necessity. As the children enter so young that they are not ready for first grade work, they need two years to finish the grade. This makes it necessary that the teacher shall either give them work not adapted to them, or neglect either the youngest or oldest in the room, because she cannot adapt her general lessons to all. As I have stated before, it should be added for the complete equipment of the practice school. 3. A monthly fund for supplying books, magazines or apparatus as needed.

I keenly appreciate and have seen the beneficial effects of the supplying of two needs of the school during the

past year; one, the addition to the library, the other, the payment of the fifteen dollars per month to the teachers of the practice school for the extra work required by the Training School.

I feel that it is but justice to express the obligation which the Training School is under to those connected with the Public Library, not only for their obliging spirit, which perhaps might be taken for granted from a public institution, but for the very helpful spirit shown in many ways beyond anything that could be required. The situation of the school, near the Library, is most fortunate.

I would call your attention to some further needs of the school not before mentioned. One which is sure to meet with opposition, but which will soon seriously hinder the progress of the school, is the necessity for the lengthening of the period of instruction. Not only does the shortness of the time necessitate work more superficial than it should be, but it is simply impossible to include in a course for so short a period, all that should be given as a thorough preparation for teaching according to the most approved and progressive ideas of the time.

Another reason is that time is needed to grow from the attitude of those under direction, to that of appreciation of their position as directors and to establish them in the true teacher's spirit. I conceive the purpose of the Training School is not to supply with work those who may need it or wish it, but to prepare teachers for their profession. The teacher's work is too vital to the whole organism of society to treat it as a charity. When the real dignity and sacredness of the teacher's work shall be understood, it will command the highest talent, most appreciative preparation and most earnest devotion. We, ourselves, must set

the standard by which the teachers of the future will be judged.

Another need is for some provision for a graduate course, or one for those especially who completed the course before the school granted a diploma. These feel themselves at a disadvantage, and a number have asked for an opportunity to work for a diploma.

I would suggest that no one be allowed to work more than two terms for a diploma, as my experience in supervision has shown me that if there is fitness for the work, it will manifest itself in that time.

I found it necessary to make some changes both in the number of monthly meetings with the different classes and in the character of the work done. These were caused by the introduction of the new work outlined in another place.

Instead of one meeting a month for each of the three classes, in one instance I called two in one month for one of the classes and for the other two but one. During one month I met them by grades instead of classes, which necessitated five meetings instead of three for that month. I called for more reports on the work, for lesson plans of lessons that had been given, or that were to be given, for a series in different subjects on one topic to show concentration of work, and for work done by the children. As my time for supervision is all too short, these meetings and the work brought to them seem indispensable.

The course in psychology has been changed in accordance with the needs of the students. It has been necessary to reduce the subject to the essentials in order to make plain its vital relation to teaching. The time of instruction in psychology is so short and its value in teaching so great that it ought not to be pursued merely as a science; it

should be studied for its practical applications to the work of the teacher. Hence, text books cannot be used exclusively to advantage. Help must be sought from writers who have devoted themselves to the study of children, from magazine articles, and from reports on observations of children in which generalizations have been made. In some cases observations on the part of the students have furnished the most valuable material. The emphasis of the work, I repeat, must be on its application to teaching.

As character is the end of education, and conduct, *i. e.*, activity, is the manifestation of character, the basis for the treatment of the subject has been made the idea of activity. As in all other subjects, the order of treatment is the order of historical development. Activity, therefore, is first considered as uncontrolled or unconscious will, as reflex action in fact, and this (the will) is shown as developing in range and meaning until it reaches complete freedom. From the primitive stage, (1) reflex action, it passes through the forms of (2) instinct, (3) induced attention, (4) voluntary attention, and (5) reflection, which is brought under the head of activity as being the stimulus which moves the will, and expression. Reflection organizes the material (impressions) furnished by previous processes. There is involved in reflection, therefore, the processes known as perception, or the gathering of material through the senses, apperception or assimilation, memory or retention, imagination or universalizing, induction or unifying, and deduction or adaptation of material. The final, culminating stage is expression or the manifestation of the will, which is at first obstructed, giving rise to feelings of pain; then, as obstructions are overcome, achieves its freedom, producing feelings of satisfaction or pleasure. The highest form of activity is thus the free exercise of the rational will. In the course, the relation between these

forms of activity and the development of the child was traced, and its application to the course of study noted. (Course of study in practice school.)

In connection with the theory of the school in which the relation of the school to other institutions is shown, more has been done than formerly in tracing the historical development of each of the social institutions: family, school, industrial life, state and church; as its application in the practice school demanded a knowledge of the whole forward movement in the development of the race. For the same purpose, the thought of the modification of history by environment, and environment through history was emphasized in geography, and the relation between history and language in the work in language. In this way it has been possible to concentrate not only the subjects taught in the Training School, but to connect these with the new work in the practice school and thus bring all into more vital relationship than ever before.

The preparation of the work in psychology and study of some of the prominent educational theories of the times, led me to introduce into the practice school certain experimental work which has proved so satisfactory that I feel justified in continuing it.

The experimental work which I here present has now had a trial of about eight months. It has been tried by the teachers in the practice school and, during the last term, by the sixty-four members of the Training School who were teaching and still under its supervision.

Though not carried out anywhere as completely as I could desire, the most thorough and systematic work has been done in the practice school. In most cases it has been introduced gradually as a basis for the formal studies,

viz.: reading, language and number, in order that it might not conflict with the required course of study.

Those who have shown the most intelligent comprehension of the work have found that there need be no conflict with the regular programme, but that on the contrary the topics of the regular course can, in connection with this work, be presented to still greater advantage. In carrying it out fully, there are some difficulties to be met, but none in my opinion which in actual practice will be found insuperable.

I will state briefly some of the fundamental ideas I am trying to work out. It will be recognized at once that the theories are not new in the educational world. It is the application of them that is new.

I. I take the ground that all the work of the school affects the child's character, that we cannot isolate a part of the training and call it moral training, another, and call it mental, but that at each instant the whole child, physical, mental and moral is influenced as a unit. Development seems to begin with the clash of instincts. The instincts of self-preservation and self-promotion which manifest themselves as man supplies his physical needs, come in collision with each other and cause an interval before action. In other words man pauses to think before he acts. As he meets and overcomes the impediments found in his environment, this interval is increased. The growing interval of reflection engenders self-consciousness. When self-consciousness is completed it results in rational freedom.

If the child is so guided that he may pass through these stages without needless friction, he may so much the sooner acquire rational freedom and so much the more rapidly advance the development of the race.

For example: The instinct of destruction cannot be crushed out, and need not be repressed. It may be directed to good ends; or, to take another case, a child who shows the nomadic instinct should be helped into the stage of acquisition and enjoyment of possessions.

The development of the child seems to repeat the development of the race, hence it would appear, logically, that the most appropriate material for the stimulus of the child's development should be found in the great epochs in the history of the race which correspond to his stage of advancement. Man's advancement has shown itself in different ways.

His power to image, reflect and express himself in language, arts and inventions has increased; as, for example, when he found limitations of his sense organs, he made extensions of them, as in the microscope and telescope. When he realized the limitation of his powers of locomotion, he foreshadowed his development in the "seven league boots" and magic carpet, and then later he made levers, engines, boats, etc.

Man stands in intimate relations with nature, and through his reaction against nature he reaches some of the greatest results in self-interpretation.

From being at the mercy of his environment, man is fast deciding where the home of plants and animals shall be, is learning to resist forces or bind them to his own use. As he emerges from under the dominion of nature and achieves his freedom, the result of his struggle is manifest in various forms of expression in which he moulds nature to his own thought or objectifies himself.

As man has met and overcome the obstacles offered by his environment, he has had to measure himself against them and make himself equal to them. To measure him-

self thus he has made his own standards by which to measure. These vary according to the nature of the resistance of the environment measured. These are the fundamental experiences of the race which the child, who is to develop as the race develops, must have brought before him and impressed upon him. But something more than mere presentation and impression is necessary. The child must in his own person be made to act out the experiences. As Froebel says: "What we imitate, that we begin to comprehend."

Let a child, through mat-weaving, slat-weaving, or any other appropriate occupation, learn the principle of weaving and he is more surely on the way to interpret any application he can find for it, than he could be without the presentation and actual application of it in this primitive form.

Man, however, stands in vital relations not only to nature, but to his fellow-men as well. These relations have crystallized into the institutions, which, having their origin in the family, have grown into the great social, political and economic institutions which promise the union of men in one great brotherhood. Of these relations the individual must become conscious for the benefit of others and himself if he is to react upon his environment, whether natural, human or divine in freedom.

Why is it not possible through gradual and easy steps to lead even a child to see that the greatest good to his neighbor means greater good to him, and the greatest good to him means greater good to his neighbor? It seems to me that if the spirit of entering into the joy of others, rather than destroying it could be cultivated among the little ones, a great problem would be solved.

If what I have stated be true, then in the education of the child we should not only follow a logical order, but follow a complete round of experiences.

Increased freedom requires insight into more undylying unities, which insight must be gained by seeing things as they are in reality, not isolated but in sequential relationships. Nothing lives to itself. The robin out in the grass is related to the most distant star. The same planet or animal appears under different forms at different times. Who that had not observed or been informed, would know the butterfly or the frog, as the same animal under the different forms manifested during different stages of growth? There is danger, too, that if I do not know the real sequence I may invent one. I may live in dread of a dire disaster from seeing the moon over my left shoulder.

II. It follows from the above that, not only should the work of each grade be built upon the work of the grade below, but all the work correlated so that every subject may grow out of, strengthen or furnish material for other subjects, the work being organized so that certain subjects which provide thought material are made fundamental while others which deal with symbols of thought are duly subordinated.

III. It also follows that a logical order should be observed in each subject, and each topic determined by the nature of the subject. This being the age of activity, the lessons appropriate to our time are not so mnch object les. sons as action lessons and those involving real actions as well as imaginary.

A better reason, however, is that action is important, because it means conduct; conduct shows character, character is the individual.

The activity studies should be a complete round appropriate to the subject; if a deed be studied, motive, deed and result should be covered; if a plant, from the seed around to the seed again; if an occupation, to complete it, product; if an animal, its life history.

To express the same thought in another way, in the study of plants and animals we should follow the progressive reaction of these as organisms against their environment.

The sequence used in the study of any subject should be based upon the law or laws of association most appropriate to it.

IV. Finally it follows that each lesson should grow from the one before it and a logical order should be observed in teaching, to allow the free movement of the mind from the presentation to the generalization and expression.

In accordance with these principles I have chosen as a basis of study the great epochs in the history (mainly) of our own race, taken in comparison with our own time.*

The periods studied are:

The Oriental.
The Greek.
The Roman.
The Mediæval.
The Renaissance.
The Modern.

---

*It will be noticed that the periods which I have selected in the application of this idea—an idea for which Froebel, Herbart and others should be given credit—are wholly different from those which have been selected by the modern Herbartians. My reasons for differing from these excellent authorities cannot here be given in detail. I will say briefly that I think the idea, to be made effective, should be carried out in a thoroughgoing and comprenensive way, and for this, the schemes proposed by the writers named do not appear to provide.

These are taken in the primary grades. In the grammar grades the steps are retraced in connection with geography, and expanded. I shall confine myself to the plan for the primary grades.

The story of some child is used to embody the experiences of the epoch studied.

For the first period I have taken Agoonack from the "Seven Little Sisters" (by Jane Andrews), Hiawatha, and, from the "Ten Boys" (also by Jane Andrews), the characters Kablu and Darius. Children enter school so young that it may be necessary to begin with an early period. The order given for the characters to be studied is determined by the instincts manifested, the habitations, occupations, implements, customs and other forms of expression. For the Greek period, Cleon, and for the Roman period, Horatius, from the "Ten Boys," are used.

These are merely the basis, and the teacher fills out or leaves out as she has need. In the same way Wulf, the Saxon boy, and Gilbert, the page, are used for the Mediæval period. For the Renaissance period are Columbus, and an English, and a Dutch boy. For the Modern period, historic characters from the different periods of our own history to the present time, are taken. In all periods comparison is made with the present. Lines of study are carried through the grades in order that through comparison with what precedes, the progress and development may be noted.

In the lowest grade, but few lines can be taken if the best results in expression are obtained. A logical sequence for the work seems to be, first, a study of the child itself, and gradually extend its experience outward; showing development in self-knowledge, family life, conflict with,

and conquest over nature in supplying fundamental needs of food, clothing, shelter; participation in social institutions, as school, business life, state and church.

As examples of lines of study: Submission in one age grows to obedience, then to self-assertion, happy, careless indifference, self-control, self-direction, service; in architecture, mound, tent, hut, arch, column, dome, spire.

The common clay cups and jars of Kablu's time grow into the artistic pottery of later times; the primitive plow, made from the limb of a tree, to the steam plow, making many furrows at once; the primitive cart to the engine; canoe to the best ocean steamer; rubbing dry sticks together to the electric light; the father as the head of the family, to the federal republic.

Literature and the other arts are taken from the periods studied or that which describes the period, for one line; another line is connected with season study.

The old Aryan myths of the "Sleeping Beauty," "Jack the Giant Killer," "Cinderella," etc., and the fables, the personification of objects in nature, whether in prose or verse, delight the little ones.

The stories of the Iliad, Odyssey and Æneid, full of action; extracts from Virgil's Georgics for season teaching; poets, painters, sculptors, musicians, heroes, furnish an embarrassment of riches in the Greek and Roman periods. No better means of discipline could be desired than the ideals supplied through the age of Chivalry; as King Arthur, who "wore the white flower of a blameless life," his knights, the idea of growth from page to squire, and squire to knight, carried out in fighting the faults and difficulties

in the school room. The art of this period and the next, the builders who

"Wrought with greatest care
Each minute an unseen part
For the gods see everywhere,"

the music and painting all prove these valuable periods.

In the nature study there are two lines of work. One might be called a perspective view, to give the child the idea of sequences and unities as, in the study of an animal, to go from the egg through the life history to the egg again, summed up in such a sequence as this for the Caterpillar:—

The caterpillar eats.
The caterpillar grows.
The caterpillar spins.
The caterpillar sleeps.
The butterfly wakes.
The butterfly flies.
The butterfly lays.

—Usually not more than one stage in the life of an animal can be observed at a time. If possible, every stage should be studied. But I think many such sequences as the above for plants, animals, season work, occupations, etc., should be given for the sake of having the child see things in sequences and unity under different forms.

The other line of work is the study of nature at hand through different seasons.

The study of the evironment of the different children, as Agoonack, Kablu, Darius, etc., in comparison with that of the pupils, may be made to supply all the fundamental ideas of the earth as the larger home of man, affecting him and affected by him. (Geography.) This work in the third grade brings the children to type forms and consciou

generalizations, and in the fourth grade there is a study of the history of the earth as a planet, as a basis for the study of the structure of the earth as a whole.

On the thought-work I have indicated, the formal subjects are based.

The children read about the subjects of study. The vocabulary (an old bugbear) is whatever it may be from the subjects studied. Children can read anything they can talk about. To supply reading matter is one of the problems.

Teachers can present beautiful lessons in script, but more printed matter is needed. Some of the best readers, as the Normal, furnish good material, but there is not enough of it. Some parts of the work are not touched by the readers, and, worst of all, most lessons are written with a view to the vocabulary and not the thought. If the plan I have proposed of printing the lessons made by the teachers can be carried out, we can have an abundance of appropriate printed matter.

In the upper grades the children have mastered the process sufficiently to have solved the problem of learning to read, and while there is still dearth of material for some features of the work, time, a good public library and an enthusiastic teacher will supply the need.

Of course, the language work, both oral and written, is but the expression of impressions from all sides of the work, and technical points are introduced as needed. The form of sequences mentioned before is quite a feature of this work. The thought of action, which I emphasized above, points to narration as the form of discourse most profitable to be practiced, and the verb as the part of the

sentence upon which emphasis should be thrown.† Description and the other forms of composition should, in my opinion, cluster around narration.

The idioms requisite and appropriate to each form of composition will follow logically from the thought.

This feature of the work has been found exceedingly satisfactory in supplying a logical order for development of subjects, as a basis for memorizing reproductions, as an aid in the choice of words and as a basis for a novel and effective method of teaching reading to beginners.

The term, sequence method, as used here, means the presentation of the essential points in a complete series of logically connected ideas, mainly by the use of verbs expressing activity of one subject.

The purpose of treating any subject by the sequence method is:

1st. That the subject may be seen as a whole, thus satisfying the natural desire to know the whole of anything and at the same time creating a habit of looking at things as wholes.

2d. That unity may be perceived under different forms—a process which throws light upon many things that would otherwise appear mysterious. Seeing unity under many different forms has constituted the development of the different sciences and has brought us to our present stage of civilization.

3d. That the progressive steps leading to a particular result may be perceived, and the child thus be led to see

---

†My indebtedness to M. Gouin's "Art of Teaching and Studying Language" for this last idea—that of emphasizing the verb—will be apparent to all who have consulted that suggestive work. I have, however, made an entirely different application of M. Gouin's principle.

that all things are the result of causes, and so learn to direct his conduct to right ends by a rational will. Secondarily, to furnish a basis for memory.

4th. That the mind may form a habit of grasping quickly the essentials and subordinating the minor points, thus attaining to broader and more correct views of life and learning to do a share of the world's work more efficiently.

According to the above analysis four points are to be observed in applying this method :

I.

A whole round of experience should be used.

(*a*) If a plant or animal; the completed life experience as: of a bird from the egg to the egg again; if a plant, from seed to seed again.

(*b*) If an occupation, to completed product.

(*c*) If a deed—motive, deed, and result.

ILLUSTRATIONS.

(*a*) The bird; is hatched, eats, grows, flies, builds, lays. The apple seed; is planted, warmed, fed, sprouts (the apple tree), grows, blooms, bears.

(*b*) Wool; is cut, cleaned, rolled, spun, woven.

(*c*) The Blue Bell; grew, watched, changed, teaches. Poem about the blue bell of Scotland that changed from white to blue by watching the blue sky, and had a star formed in its cup from watching the star. The last stanza :

"The patient child whose watchful eye,
Strives after all things pure and high,
Shall take their image by-and-by."

II.

A central thought or subject must be retained throughout the sequence.

ILLUSTRATION.

The Pied Piper : appeared, declared, asked, was promised, blew, succeeded, asked, was refused, threatened, blew, drew, taught. (Other points in the poem subordinated to these.)

III.

The points must be presented in some progressive order ; it may be of time, place, cause and effect, means and end, whole and parts, comparison.

ILLUSTRATION.

Study of leaf bud from outer to inner parts; under means and end; aspect of tree carried from arrangement in bud, through twig, branch, trunk; in animal, life history used as basis, and all relations of parts (as appearance, adaption and use) and environment (affected and affecting) given in relation to this.

IV.

The purpose is defeated if so many points are presented that the mind cannot grasp the complete basal sequence at once. This does not prevent amplifying any of the essential parts of the sequence afterwards. The purpose may be defeated if, in the basal sequence minor points are put on an equality with the essential points.

ILLUSTRATION.

Rip Van Winkle, to escape Dame Van Winkle, went up into the mountains. While there, through indulgence in his special weakness, he fell asleep. He awoke to find he had overslept twenty years, and was almost forgotten. These give the motive, deed and result to the whole story. Each of these should be expanded.

There is no subject in which this method of sequences can not be applied with profit. As applied to reading, it gives what may be called the 'paragraph method.' In the reading work for beginners the subject is presented first in conversation lessons. Then the sequence is drawn from the children through the questioning of the teacher. As the sentences are given by the children they are placed upon the board, until the whole sequence is thus written. When this has been done, the children, who by this time know the whole story, are able to read the story from beginning to end. Children thus learn to read paragraphs, that is, complete groups or sequences of ideas, instead of separate sentences. It is the testimony of all who have tried the "paragraph method," that children learn to read by it much more rapidly than by the sentence or other method. The words (the verbs) are learned by means of parallel sequences and as by the sentence method.

To illustrate :

Main Sequence.	Parallel Sequence.	Generalization.
The caterpillar (picture) eats.	The spider (picture) eats.	The bird (picture) lays.
The caterpillar (picture) grows.	The spider (picture) grows.	The girl (picture) spins.
The caterpillar (picture). spins.	The spider (picture) spins.	The horse (picture) eats.

ıe caterpillar (picture) sleeps.	The spider (picture) sleeps.	The cat (picture) wakes.
ıe butterfly (picture) wakes.	The spider (picture) wakes.	The owl (picture) sleeps.
ıe butterfly (picture) flies.	The spider (picture) crawls.	The bird (picture) flies.
ıe butterfly (picture) lays.	The spider (picture) lays.	The boy (picture) grows.

After the main sequence is given and words learned, e pictures (if used) may be changed to words, objects lded or sentences completed, as ;

The caterpillar eats leaves.
The caterpillar grows fast (or large).
The caterpillar spins a cocoon.
The caterpillar sleeps in a cocoon.
The butterfly wakes up.
The butterfly flies high (or to flowers).
The butterfly lays eggs.

Then each part may be expanded, as—

1. The yellow caterpillar eats leaves.
2. The green caterpillar eats cabbage leaves.
3. The green and yellow caterpillar eats potato leaves.

The bird eats worms, seeds, crumbs.
The red bird eats worms.
The yellow bird eats seeds.
The snow bird eats crumbs.

The bird eats with his bill:
The yellow bird eats with his short bill.
The humming bird eats with his long bill.
The duck eats with his broad bill.
The yellow bird eats seeds with his short bill.
The humming bird eats nectar with his long bill.
The duck eats fish with his flat bill.

These illustrations are intended merely as suggestions. The words intended for a permanent vocabulary are the only ones it is necessary to drill upon; the others are treated as sight words. Any word, no matter how long, may be introduced and learned if the child learns to use it in talking.

A distinction must be made between the vocabulary for reading and that for spelling. Any thing which furnishes a subject for language lessons, whether from history, literature or science, may be used for a reading lesson in the first as well as other grades.

The material dealt with in number is taken from the thought subjects, with the idea that the purpose is to secure the ready and accurate measurement of equivalents, the standard varying according to the part of the environment considered. One of the *first* ideas the child must get is that of balance, equality, equivalents. He needs it in his contact with his entire environment. This requires measurement, and for measuring we need standards. These are needed whether finding equivalents in nature, applying those established by man, measuring private interests against public good, or setting up near against remote ends.

In arithmetic, the tendency has been too much to impose upon the child, ideas which grow out of no necessity which he was led to perceive, and which had very little connection with his every day experiences. Money, and measuring the individual by his standing in a percentage column, have been emphasized until they are reflected in our national life. Gymnastic exercises in the language of number have produced arithmetical athletes who do not know why they are made athletes, nor what to do with their strength, unless it might be to use all their mighty

power to make change or get ahead of some one—thus making the field in which the child has been led to exercise his power too small, and the work done, not to satisfy some need, but for the sake of the exercise. The contents of modern arithmetics have not sprung full grown from the mind of man, but have been a gradual development growing out of vital relations to his environments.

The child can have presented to him, either in reality or through the imagination, the conditions which call for the measurements and standards which man has developed so far in history and which are in common use. For the unusual or those used by a few, special needs will supply the necessary motive for study and application of them. Some just coming into use, but connected with important factors of our civilization might well take the place of some outgrown. Some touching the æsthetic side of life overlaid by materialistic tendencies might well be revived. I would therefore make the number ideas, comparisons or measurement, standards and symbols grow out of a seen need for them, have them used truthfully, include those which spring from an all-sided experience, and call the work measuring, not arithmetic nor number. The outline of work we are following is well adapted for presenting the proper material in this way. For example, the teacher as she weaves the story of Kablu, the Aryan boy, and compares him with the children with whom she is talking, has by means of the different groups which the members of the family take in performing their daily tasks, the making of the cups and jars, the making of the clay tiles, the farming, weaving, building, an unsurpassed opportunity for presenting fundamental number ideas, measures and standards growing out of primitive needs, which if carried out by proper expression (meaning some actual doing) will give

both a working knowledge of the subject and permanent acquisition. Established standards may be followed to some extent historically in comparison with those in present use and should include not only those for content of number, dimensions, value, etc., but color, form, velocity, position, forces, etc. To study, for example, the relative strength of arches of different width and height by working with bricks of clay, while studying the Persian boy, or getting the effect of columns of the varying proportions between height and diameter, which the Greeks used, while studying the Greek boy, may yield quite as good number results as problems about cats, dogs, apples and money, and contribute something of value besides.

The following outline indicates the lines of study in history.

In this work, for every essential impression there must be appropriate expression.

In connection with each point used, comparisons must be made between the Child of History and the children taught.

Whenever it can be done to advantage and material for it can be found, the ideal side as manifested in literature and the other arts, should be taken as an aid to the actual side presented in the fact given.

Not every point here given should be attempted in each grade, or with each character studied. The main points should be followed, but the time, material that can be obtained, the responsiveness of the children and extent of expression necessary, must be determining factors in deciding the number of impressions that can be given.

A list of books which have been found useful in sup-

lying material for teachers is being prepared, also aterial suitable for reading matter for the children.

Child of History.

(1.)

Character.
Plays and duties.
Clothing.
Measures and Standard.

(2.)

Home.
People.
Customs.
Structure.
Utensils and Furniture.
Adornment.
Measures and Standard.

(3.)

Natural Environment.

Earth..... { Structure. Drainage. Climate.

Products..... { Animal. Vegetable. Mineral.

Forces.

Heavens.

Measures and Standards.

(4.)

School.
Where.
What studied.
How long.
Teacher.

(5.)

Business life.
Co-operation in home.
Co-operation outside.
Division of labor in home.
Division of labor outside.

Occupation connected with . . { Food. Clothing. Shelter. Means of communication. Luxury. Society. Protection.

Outer selves—Carts, boats, etc.
Inner selves—Books, music, pictures, etc.
Measures and Standards.

(6.)

Social life.
Duties.
Pleasure.

(7.)

State.
Function as—Mechanism, larger self.
Necessity for Law.

Necessity for Head.
Gradual separation of three departments.
Gradual sharing of all.
Gradual provision for all.
Privileges and duties.
Measures and Standards.

(8.)

Church.
Growth of idea of God.
Growth of worship at one time and in one place to ought, word and deed.

Outward signs—Stone, Altar, Shrine, Temple, Cathe-al, Church.

Adornments—Pictures, Music, Carving, Stained Glass :ulpture, Designs.

Measures and Standards.

Music, Writing and Drawing as forms of expressio e easily based upon the thought work. I regard forms expression appropriate to the subject of the lesson one of e most important points educationally, and the only anual training as yet introduced is the attempt to give gical and appropriate expression to each essential im-ession by such means as drawing, molding, painting, aking, singing, acting. The work as yet is in its first perimental stages. In time it is hoped to supply to the hool room all the material which is needful to create the mosphere of the period studied. To that end the black-ards are used to illustrate the subjects studied, and for curing greater abundance and permanency of illustration, eets of manilla paper, three feet by two, on which the ustrations are made with crayon or charcoal, are placed a kind of frieze around the room above the blackboard.

HARRIET M. SCOTT,
Prin. Detroit Normal Training School.



PRINCIPAL'S REPORT, HIGH SCHOOL.



TABLE SHOWING WHOLE NUMBER ENROLLED, ETC. - *Continued.*

TERM ENDING	9 B.	9 A.	10 B.	10 A.	11 B.	11 A.	12 B.	12 A	Special.	P. G.	Total.	Total enrollment for year	Yearly percentage of increase	Average membership	Percentage of increase of av. membership	Graduated.	Graduated total for year	Average attendance.
January, 1890	249	158	112	87	75	44	59	33	0	17	834		.....	...	.....	31		....
June, 1890	256	153	117	102	82	53	61	16	0	10	899	1042	9.33	720	7.80	35	67	764
January, 1891	258	188	135	101	78	68	48	16	0	16	935		.		. .	24	.	...
June, 1891	279	191	159	101	72	67	63	25	0	14	978	1144	9 78	858	9.80	39	63	829
January, 1892	284	178	139	121	90	69	74	24	0	12	980		.. .		.	30	. .	.. .
June, 1892	310	188	141	16	101	65	59	49	0	15	1057	1219	6 67	935	9.61	64	94	919
January, 1893*	327	223			57	73					1058			.	.	24	...	.....
June, 1893	312	246	200	100	104	90	74	34	0	4	1191	1350	10 74	1017	8 76	42	66	951

*Owing to loss of records by fire data for this Semester are incomplete.

TABLE OF MEMBERSHIP BY CLASSES AND COURSES OF STUDY.

Complete Enrollment for Second Semester, 1892-93.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH.			COMMERCIAL.			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	12	1	13	25	40	65	59	14	73	30	116	146	33	7	40	1	4	5	160	182	342
9 A	12	6	18	17	34	51	33	20	53	15	77	92	14	9	23	3	6	9	94	152	246
10 B	6	2	8	15	38	53	20	10	30	14	53	67	15	11	26	7	9	16	77	123	200
10 A	3	2	5	7	19	26	12	6	18	4	32	36	4	2	6	1	9	10	30	70	100
11 B	9	5	14	6	9	15	13	3	16	6	30	36	7	1	8	5	10	15	46	58	104
11 A	9	3	12	12	13	25	5	4	9	5	34	39	2	2	4	1	..	1	34	56	90
12 B	4	4	8	7	18	25	5	1	6	10	19	29	2	1	3	1	2	3	29	45	74
12 A	..	3	3	1	5	6	1	2	3	2	18	20	..	2	2	..	..	..	4	30	34
P G	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	2	2	4
Total	54	26	80	85	177	262	153	61	214	86	379	465	79	35	114	19	40	59	476	718	1194
Graduated (first semester)	3	..	3	3	3	6	1	1	2	1	10	11	2	..	2	..	..	..	10	14	24
Graduated (second semester)	..	3	3	1	7	8	3	2	5	3	21	24	..	2	2	..	..	..	7	35	42
Graduated total for year	3	3	6	4	10	14	4	3	7	4	31	35	2	2	4	..	..	..	17	49	66

TABLE SHOWING THE COMPLETE ENROLLMENT.

OF THE

HIGH SCHOOL,

BY TEACHERS, GRADUATES, AND STUDENTS, FROM ITS OPENING. 1858, TO JANUARY, 1893.

Owing to various methods of keeping records, slight errors may occur in this table.

Fiscal Year.	No. of Teachers.	No. of Graduates.	Enrollment.	Remarks.
1858	1	..	54	
1859	1	..	63	
1860	2	2	117	
1861	4	2	...	Report not found
1862	4	4	111	
1863	4	9	122	
1864	4	10	126	
1865	4	14	125	
1866	4	19	144	
1867	4	16	172	
1868	4	19	202	
1869	4	22	234	
1870	7	41	293	
1871	6	32	281	
1872	6	28	329	
1873	9	59	397	
1874	11	51	474	
1875	11	78	583	
1876	12	68	858	Before 1876 the fiscal year ended in December; after '76, in June. Ninth and tenth grades admitted from Grammar School to the High School in 1876.
1877	17	88	785	
1878	21	72	864	
1879	21	74	942	
1880	23	66	801	
1881	23	78	773	
1882	22	82	770	
1883	21	71	702	
1884	24	75	743	
1885	23	48	784	
1886	23	52	839	
1887	25	64	833	
1888	26	58	859	
1889	29	94	953	
1890	32	67	1043	
1891	33	63	1144	
1892	36	94	1219	
1893	36	66	1350	

the excavation made for the building itself. During the year, too, the school has lost its old home and been forced to seek temporary quarters in the Biddle House until the new building may be completed. On the morning of Jan. 27, 1893, the High School building was burned to the ground. With it we lost all records, books, and apparatus of the school. It was a historic building, in part the original Capitol of Michigan, and it is to be regretted that it is impossible here to tell something of the history of the old building of which now no vestige remains. Although I cannot speak at length of the building, I cannot forbear to mention that while the fire was still burning, Rabbi Grossman, of the Temple Beth El, had tendered us the use of the Temple for our school. The Eleventh and Twelfth grades met there the following Tuesday, and regular work was begun with one day's loss of time. The Ninth Grade met for organization in the Central Presbyterian Church Wednesday and Thursday. The Tenth Grade began work in the afternoon in the Temple Beth El, Friday, Feb. 3rd. It should be said that the trustees of the First Unitarian Church had offered the use of their beautiful new building for the use of the Tenth Grade, but it seemed better that it should meet in the same place with the Eleventh and Twelfth grades, and the offer was declined. Early the next week the Ninth Grade began regular work in certain subjects at the First Baptist Church. I feel that the heartiest thanks of every friend of the High School are due to the officers of these various churches who in an hour of need offered us a roof under which we could go on with our work.

On the evening of January 28th, a part of the Biddle House was rented for the use of the school, and extensive alterations were begun the next week. March 13th the

school was domiciled in its temporary home. Our laboratory work was begun at once. In almost all ways the work of the school has gone on as before. I must mention the liberality of the Board of Library Commissioners in replacing the books from the Public Library. Without these our work would have been hopelessly crippled. With these and the reference books immediately purchased by the Board we have been able to do much of the reference work that has been so valuable in the past. When we have the books for which an appropriation has been made, we shall again have an admirable working library.

I must also speak of the admirable spirit shown by the Board of Education in the disaster to the school. There was not a moment's hesitation, but all money was voted necessary for the immediate needs of the situation. Every one seemed willing to do all in his power to lighten the difficulties of a very grave situation. There was an enormous amount of extra work caused the teachers of the High School. It would be impossible to praise too highly their spirit and labors. Particularly must I mention the clerk of the school, Miss Hopkins, without whose admirable executive ability it would have been impossible to have got things started again in so short a time. It is a remarkable fact that in six weeks from the fire the office records for all students enrolled that term were practically complete. They have since been verified and are now to be depended upon.

The High School Alumni Association has continued its good work during the past year. A second student has been sent to the University by its aid. Its annual meeting, Jan. 27, was the most successful yet given and added to the scholarship fund. A bill has passed the legislature providing for the incorporation of its Board of Trustees, and steps have been taken toward this incorporation.

This year the University authorities have extended the "diploma privilege" to our graduates for three years without the usual visit of inspection. While this is gratifying in all ways, it is especially pleasing in showing that our students must be maintaining a good rank in their University classes.

For several years I have been obliged to say something of our building and the desirability of added accommodations. That question has been pretty effectually settled this year. We have room where we are, but some changes are needed to make the building safe from a sanitary point of view. I trust that the Board may authorize them during the coming summer.

Very respectfully yours,

FREDERICK L. BLISS.

❋ COURSE OF STUDY. ❋



OUTLINE OF THE COURSE OF STUDY

FOR

PRIMARY AND GRAMMAR GRADES

SEPTEMBER, 1893.

B CLASS--First Grade.

LANGUAGE.—Daily work in copying sentences from the blackboard. Capitalization and punctuation of simple sentences taught by imitation.

Daily lesson in oral language; lead children to express themselves clearly, correctly, and completely in these conversation lessons.

Material for oral lessons:

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Fairy stories and myths.
5. Elementary Physiology.
6. Picture lessons.
7. Poems.

See detailed course in Language.

READING.—

Appleton's Chart, 20 lessons.
Appleton's First Reader, begun.
Barnes' First Reader, begun.

Supplementary work:

Harper's First Reader, begun.
Normal Course First Reader, begun.
Blackboard lessons. Science and history.

See detailed course in reading.

SPELLING.—Vocabulary consists of all new words in reading work of grade as outlined in detailed course.

Children should copy correctly in sentences all words in grade vocabulary, also write from dictation all words in chart vocabulary.

Spell by sound all analyzed words.

NUMBERS.—1 to 6, inclusive, all combinations.

Fractions.—$\frac{1}{2}$ and $\frac{1}{4}$.

Compound Numbers.—Pint, quart, 2 pints = 1 quart; linear inch; square inch; pieces of money, one cent, two cents, three cents, one dollar, two dollars, three dollars; postage stamps, one cent and two cents.

Measure by inches to six inches.

Measure by square inches to six square inches.

See detailed course in numbers.

PHYSICAL CULTURE AND PHYSIOLOGY.—Simple limb movements, also correct sitting and standing positions. See work of grade in detailed course.

Names and number of different parts of the body.

The Eyes:

1. Importance and situation.
2. How injured by abuse.
3. Training of eyesight.

The Ear:

1. Importance and situation.
2. How injured by abuse.
3. Care of ears.

Smell and Taste:

1. Uses of these senses.
2. Care of these senses.

Illustrations from chart.

WRITING.—Slates of proper size ruled with slate rulers; pencils long and well sharpened; correct position of body, feet and arms, with pencil pointing over right shoulder, and wrist up from the desk.

First two weeks.—Thorough drill upon simple exercises to secure freedom of motion and control of the pencil.

Make the letters i, u, w, m, n, v, o, e, c, a, x, two spaces high, and r, s, two and one-half spaces high in first practice. Complete alphabet of small letters by the close of the twelfth week. Begin writing words as soon as enough letters have been learned to make a word. Do not allow children to write words in which there are letters that have not been given in a writing lesson. Teach such capitals as are necessary for the work.

Use counting exercises when they are helpful.

Allow no careless work at any time.

MUSIC.—Pupils shall be taught to sing songs by rote, choosing for such songs those of high rather than low pitch, also songs that the little ones can understand and appreciate, songs that will appeal to their childish imaginations so that they will be singing in the fullest sense of the term. Rote singing is a very important part of a course in music. As every child learns his mother tongue by rote, so the child must be taught to sing before he can read music. With an earnest, conscientious teacher this can soon be accomplished: It is astonishing, if proper attention is paid to this part of the child's musical training, how much can be done in a short time. They shall be taught to sing the scale, ascending and descending, at a convenient pitch, by the scale names, one, two, three, four, five, six, seven, and eight, represented by the numerals, 1, 2, 3, 4, 5, 6, 7, 8; also to sing the same by the syllables, do, re, mi, fa, sol, la, si, and do. The pitch names, or letters, are not to be taught at this stage in this grade.

Pupils are to practice from the numerals at the bottom of Chart No. 1, being made to understand that a comma after a figure means to sing a short sound and a dash means to sing a long sound.

For dictation, use the scale names; for singing, use the syllables.

DRAWING.—In connection with the study of the type forms as prescribed in detailed course of study, terms of Location, Direction and Position should be learned.

Teach expression of form in three ways: By Making, by Drawing, and by Language.

No drawing or pencil holding as an exercise *in itself* should be required for the first ten weeks, but tracing on

models in the air and on desks, and work at the blackboard should be practiced in order to deepen the impression of form.

Tablets may be used when the faces of models are studied, or about the eighth week of school.

The twelfth and sixteenth weeks should be spent in reviews, thereby strengthing the pupils in the main features of the work.

Specimens of pupils' work should be collected by the close of each term. This should consist of clay modeling, paper folding of squares and of strips to form hollow cylinders and cubes, pasting tablets for borders, for objects and for views of models; stick laying for borders and objects; and drawings on paper. All of this work will be found to be carefully prescribed in the Manual, "Use of Models," and detailed course of study.

A CLASS—First Grade.

LANGUAGE.—Daily work in copying sentences from blackboard.

Daily work in writing short sentences from dictation.

Teach the use of the capital at the beginning of a sentence, also the use of the period and the interrogation point at the end of a sentence.

Daily lessons in oral language, lead the child to express himself in complete statements in these lessons, also give special attention to his oral expression in all lessons.

Material for oral language:

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary Physiology,

Begin the writing of short original statements in connection with this oral work.

Have children reproduce the fables and historical stories after they have become familiar with the thought.

Select poems, have children learn them, also tell them in their own language.

See detailed course in Language.

READING.—

Appleton's Chart, completed.
Appleton's First Reader, Part I., completed.
Barnes' First Reader, Part I., completed.

Supplemental work:

Harper's First Reader, Part I., completed.
Normal Course First Reader, pp. 26-75.
Blackboard lessons.

See detailed course in reading.

SPELLING.—Grade Vocabulary—all new words in reading lessons as outlined in detailed course.

Pupils should write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words in grade vocabulary.

NUMBERS.—Review B, First course. Teach 7 to 10 inclusive, all combinations.

Figures to 10 inclusive. Roman notation to 10 inclusive, and sign +, =, ×, —, and ÷.

Fractions.—$\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{10}$.

Compound Numbers—Linear foot, square foot and cubic inch.

10 cents = 1 dime, 10 dimes = one dollar.
5 nickles = 1 quarter, 4 quarters = 1 dollar.
2 half dollars = 1 dollar; also 7 days = 1 week,
4 weeks = 1 month, and 4 quarts = 1 gallon.

Measure by inches to 10 inches, by feet to 10 feet, by square inches to 10 square inches.

Buying, selling and making change.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY,—Simple limb movement as given in the preceding class. Additional movements for trunk and limbs. Sitting and standing positions.

See detailed course.

The Lungs:

1. Difference between inspired and expired air.
2. How the air is prepared for the lungs in its passage through the nostrils. Bad effects of breathing with mouth open.

The Skin:

1. Structure and use as a covering.
2. Perspiratory glands, their use, effects if these glands are closed.
3. Bathing and care of skin.

Illustrations from chart.

WRITING.—Perfect position at desk whenever any writing is done. Slate always in position with pencil pointing over the right shoulder.

First two weeks thorough drill upon simple exercises with counting. Count fast enough to secure a good, easy writing motion.

Review small alphabet first six weeks.

Begin work upon capitals third week.

Write words and sentences beginning with capitals.

Allow no capitals used, in any work, different from those given in the writing lesson.

Use blackboard freely. Teachers should never allow themselves to do any careless work upon the boards at any time.

MUSIC.—Scale and interval drill.

In addition to the requirements of the preceding term, the pupils now commence Chart No. 2, singing the figured exercises as directed through to page 4, inclusive, when they shall be taught musical notation to the extent indicated in the first four exercises on Chart No. 5.

Go on in daily practice from the Charts to the bottom of Chart No. 7. Other songs at the discretion of the teacher.

Scale and interval practice.

DRAWING.—The work in this grade should be done upon blackboard and paper.

Require all drawing to be made of lines of definite lengths. Longest lines on paper should not be less than four inches.

Special drill on pencil holding and movement. Seek for freedom of expression.

Lead pupils to find their own errors.

In paper folding have some definite aim.

The summary of the term's work should consist of specimens of work done by pupils in clay modeling, paper folding of squares and strips to form hollow tubes, and square and triangular prisms; pasting tablets for borders, for rosettes, to represent objects and for views of models; stick laying to represent objects and for borders; and drawing on paper.

This work is carefully prescribed in Manual, "Use of Models," and in the detailed course of study.

B CLASS—Second Grade.

LANGUAGE.—Daily work in copying sentences. Daily work in writing sentences from dictation.

Teach use of period and interrogation point at end of sentence.

Teach use of capital letter at beginning of sentence, also in writing names of persons.

Daily lessons in oral language, giving special attention to correct and complete statements.

Material for oral language:

1. Form—see detailed course.
2. Geography—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary work.

Daily work in the writing of short, original statements in combination with this oral work and the work in reading.

Have children reproduce orally the fables and historical stories.

Poems should be carefully selected, children should learn their meaning, and then commit them to memory.

Special attention to language used by pupils in all recitations.

See detailed course in Language.

READING.—

Appleton's First Reader, Part II.
Barnes' First Reader, Part II.
Appleton's Second Reader, 10 lessons.
Barnes' Second Reader, 10 lessons.

Supplemental work:

Harper's First Reader, Part II.
Normal Course First Reader, completed.

See detailed course in reading.

SPELLING.—Vocabulary—all new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words in vocabulary, also analyze new words composed of familiar sounds.

NUMBERS.—Number work. 11 to 18 inclusive, all combinations. Review first grade work.

Notations.—Figures and Roman notations to 18 inclusive. Develop idea of tens and units.

Fractions.—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$, and $\frac{1}{10}$.

Compound Numbers.—Peck, yard, square yard and cubic inch.

12 inches = 1 foot.
3 feet = 1 yard.
12 things = 1 dozen.
12 months = 1 year.
9 square feet = 1 square yard.

Measure:

By inches to 16 inches.
By feet to 16 feet.
By yards to 16 yards.
By square inches to 16 square inches.
By square feet to 16 square feet.

PHYSICAL CULTURE AND PHYSIOLOGY.—Finger, elbow, shoulder, and whole arm movements, also toe-standing and heel-elevation.

Correct standing and sitting positions, also carriage of the body in walking.

Breathing exercises. Caution against voluntary movements of shoulders or body during inspiration.

See detailed course.

Bones and Muscles:

1. Structures and uses of each.
2. Development of muscles; effect of exercise upon the same.
3. Growth of the bones.

Illustrations from chart.

WRITING.—Perfect positions. Correct pencil holding. Show the exact position of hand, fingers and pencil and insist upon every one doing this part of the work.

Practice book No. 1; lead pencils.

First two weeks of term use simple drill exercises, giving more attention to position and pencil holding and free movement than to the exact forms of letters. Do not allow any careless work at any time. Use blackboard freely. Send a portion of the class to the board each day. Criticise the work on board. Ask pupils to criticise one another's work. Review small and capital letters in words and sentences.

Write specimens at beginning of each month, keeping first one written to compare with last. Send others home.

MUSIC.—Interval practice continued. Review the requirements of the preceding classes, and in addition to same proceed to the bottom of Chart No. 13.

Interval practice continued.

Exercise pupils daily in practice upon the ladder and with manual signs in key C or D. Teach the pitch names.

A few more simple varieties of two, three, four, and six part measure. Exercise from the staff to illustrate what is known of time and tune. Rote songs at the discretion of the teacher.

DRAWING.—Teach expression of form by Making, by Drawing and by Language, as in First Grade.

Teach by comparison. Special drill for pencil holding and free movement.

Lines of definite lengths.

Drawings large, both at blackboard and on paper.

Appearances and face views carefully expressed.

Special attention to the description of mental images of solids.

Lead pupils to detect their own errors.

Teach proportion.

The summary of the term's work should consist of specimens from each pupil in clay modeling, paper folding of squares and strips to form hollow models, pasting tablets for borders, for rosettes, for objects, and for views of models, stick laying for borders and for objects, and drawing on paper.

The detailed course of study with the Manual, "Use of Models," prescribes the daily lessons for this grade.

A CLASS—Second Grade.

LANGUAGE.—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the comma before and after the name of a person addressed.

Teach the use of the capital in writing the names of the months and the days of the week; also in writing the pronoun I.

Daily lessons in oral language; aim for accurate and complete statements.

Material for oral language:

1. Form—see detailed course.
2. Geography—see detailed course.
3. History stories.
4. Fables and myths.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Daily work in the writing of original statements, in connection with oral language and reading lessons.

Daily work in the oral reproduction of the thought of the reading lessons.

Poems carefully selected, thoroughly studied and then committed to memory.

Careful attention to language used by pupils in all recitations.

See detailed course in Language.

READING.—

Appleton's Second Reader, Lessons XI. to XXXVI.

Barnes' Second Reader, Lessons XI. to XXXVI.

Supplemental work:

Harper's Second Reader, Part I.
Normal Course Second Reader, 72 pages.

See detailed course in reading.

SPELLING.—Vocabulary—all new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words; also analyze new words composed of familiar sounds.

NUMBERS.—Number work, 18 to 30 inclusive, special attention to multiples.

Notation.—Read and write numbers to 100: Roman notation to 35.

Fractions.—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$ and $\frac{1}{10}$.

Compound Numbers.—Bushel, ounce, pound, cubic inch; also 16 ounces = 1 pound, and 4 pecks = 1 bushel.

Areas of squares and oblongs and fractional parts of the same, areas not to exceed 20 sq. in., sq. ft. or sq. yds.

Measure perimeters of these square and oblong surfaces.

Processes.—Addition of any two numbers whose sum is less than 100.

Subtraction, with reduction, minuends less than 100.

Multiplication, products less than 100 and multiplier 2.

Short division, with reduction, dividend not to exceed 100 and devisor 2.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Same exercises as for B class; also arm raising sideways and overhead. Walking exercises, "tip-toeing" should not be allowed: careful attention to carriage of body in walking.

See detailed course.

The Food:

1. Use of food.
2. Kind of food—animal, vegetable and mineral.
3. Kind of food used in cold, hot and temperate climates.
4. The stomach—illustrations from chart.

The Nails and Hair:

1. Care of these.

WRITING.—Practice book No. 1; lead pencils.

Blackboard work and specimens same as Class B.

First two weeks of term use drill exercises; do but little work upon letters. Get everybody ready for work. Review both alphabets in words and sentences. We are now getting ready for pens and ink, and very careful attention should be given to *position*, *pencil holding* and freedom of movement.

Allow no careless work at any time.

MUSIC.—Review the work of the preceding classes, then proceed on chart to bottom of No. 16.

Exercise daily upon the sounds of the scale with the Manual signs and ladder.

Songs by rote at the discretion of the teacher.

On transfer to the next higher class, the teacher should be able to report the number of pupils who can sing the scale and those who cannot; also the number who can sing alone one song from the New First Music Chart.

DRAWING.—The work of this class embraces the same general features as that of Class B.

The type forms include the cone, square, pyramid, vase form and a review of the nine models already studied.

All drawings on board and paper large and bold.

Special drill for pencil holding and free movement, with tracing in air and on board and paper.

Special attention to clay modeling, paper folding, stick laying, mounting surface forms, and drawing on paper, as directed in detailed course and "Use of Models."

B CLASS—Third Grade.

LANGUAGE.—Daily work in copying sentences containing the new words of the spelling lesson; also in writing these sentences from dictation.

Teach the abbreviations, Mr., Mrs. and St.

Teach the children to write their own addresses; also the day of the week and its date.

Teach the us of *is* and *are;* also *was* and *were.*

How to write initials.

Material for oral language and written composition:

1. Form.
2. Geography—see detailed course.
3. History stories.
4. Reading lessons.
5. Poems.
6. Picture lessons.
7. Physiology.

Daily work in writing original statements and arranging the same in logical order. Develop carefully the thought of the reading lesson; have children express this thought orally in their own language, then write it in the form of a simple composition.

Carefully selected poems studied and then committed to memory.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

See detailed course in Language.

READING.—

Appleton's Second Reader, completed.
Barnes' Second Reader, completed.

Supplemental work:

Harper's Second Reader, Part II.
Normal Course Second Reader, completed.
Wayside and Seaside, No. 1, completed.

See detailed course in reading.

SPELLING.—Vocabulary—see spelling manual for this grade.

Define, spell orally and write in sentences from dictation all words in grade vocabulary. See detailed course in reading.

NUMBERS.—Number work 30 to 60 inclusive, special attention to multiples.

Notation.—Read and write numbers to 1000; Roman notion to 30.

Fractions.—$\frac{1}{2}$ and a review of all previous work. Reduction of mixed numbers to fractions; use no fraction whose denominator is larger than 12.

Compound Numbers.—60 minutes = 1 hour, 24 hours = 1 day, 365 days = 1 year; also the number of days in each month of the year.

How to write dollars and cents, and the use of dollars and cents together in applied problems.

Teach linear rod.

Processes.—Addition of two or three numbers larger than 100 whose sum is less than 1000. Column addition of three figures.

Multiplication of numbers of one period, using 2, 3, 4, 5 and 6 as multipliers.

Subtraction with reduction, using numbers of one period only.

Short division with reduction, using 2, 3, 4, 5 and 6 as devisors.

Make statements for problems.

See detailed course.

GEOGRAPHY.—Structure—Relief of school district.

Place.—Semi-cardinal points. Maps of school room. floor and school yard, to scale.

Climate.—

(*a.*) Moisture:

1. Evaporation.
2. Productions—clouds, mist, fogs, rain, etc.

(*b.*) Heat—observe daily temperature;
Position of sun:
1. During different parts of day.
2. During different parts of year.

Vegetation.—Soil, fertile and barren.

Uses of plants.

Trees of vicinity.

Animals.—Special study of camel and bears.

Minerals.—Special study of chalk and graphite.

People.—Elementary lessons on races represented in community.

Modes of Life.—Occupation: ideas of city, town and state.

Government.—Lead children to knowledge of that which they can comprehend, about city government:

See detailed course in elementary geography.

PHYSICAL CULTURE AND PHYSIOLOGY.—Review work of Second Grade. Teach arm raising, with respiration

combined; also slight knee bending, toe raising, head and body bending.

See detailed course.

The Teeth:

1. Structure.
2. How injured.
3. Care of.

The Lungs:

1. Structure.
2. Care of.
3. Effect of exercise upon these organs.

Illustrations from chart.

WRITING.—Practice Book No. 1; pen and ink.

First two weeks of the term use drill exercises. Watch carefully the penholding. Show all how to take ink. Have them take up pens and lay them down often in order to get them accustomed to the new instrument.

Blackboard work and specimens same as Second Grade. Review both alphabets in words and sentences.

Spelling lessons and all writing previously done with lead pencil to be done with pen and ink.

MUSIC.—Review the works of the preceding classes. Begin the work on Chart one, second series.

Rote songs at the discretion of the teacher.

Pupils to be taught the Middle, Upper and Lower scales, to name the fifteen different pitches, and tell readily the position of each pitch upon the staff.

Daily exercises upon the scale with the Manual signs and ladder.

The teacher is to ascertain the compass of the voice of each pupil.

(*a.*) The number who can sing alone the scale in the key of C.

(*b.*) The number who can sing easily as high as twice marked e and no higher.

(*c.*) The number who can sing easily as high as twice marked g.

(*d.*) The number who can sing to small a in the lower scale.

(*e.*) The number who can sing to small g in the lower scale.

Songs and exercises at the discretion of the teacher.

Select songs that will illustrate what the pupils have learned in time and tune.

DRAWING.—No. 1 Drawing Book for pupils, with Manual Part I, for teacher's use.

Special study of natural leaves, fruits and vegetables, and the drawing and modeling of the same.

Much supplementary work in bold and free drawing.

Books should show a careful record of term's instruction and a free expression characterized by broad gray lines.

A CLASS—Third Grade.

LANGUAGE.—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the period as a mark of abbreviation, A. M., P. M., Av., P. O., cts., doz.

Teach the use of capital letters in writing names of cities and streets.

How to write dates.

Simple use of quotation marks.

Simple form for a letter.

Common contractions, it's, can't, don't, etc.

Form of the possessive case of singular nouns in which the apostrophe precedes the *s*.

Careful attention to language used by pupils in all recitations.

Daily work in oral and written composition. Have pupils reproduce orally the thought of the geography and reading lessons; also write the same in the form of a simple composition.

Work for complete statements and the logical arrangement of the same in this composition work.

Carefully selected poems studied and then committed to memory.

See detailed course in Language.

READING.—

Appleton's Third Reader, 25 lessons.
Barnes' Third Reader, 25 lessons.

Supplemental work:

Cats and Dogs, completed.
Fables and Folk Stories, completed.
Normal Course Third Reader, begun.

See detailed course in reading.

SPELLING.—Vocabulary—See spelling manual for this grade.

Define, spell orally and write in sentences from dictation all words in grade vocabulary. See detailed course in reading.

Spell new words which occur in geography and number.

NUMBERS.—Numbers work, 60 to 100 inclusive; special attention to multiples.

Notation.—Read and write numbers of two periods; Roman notation through to 100.

Fractions.—Continue work of preceding grades.

Teach reduction of improper fractions to whole or mixed numbers; use no fraction whose denominator is larger than 12.

Teach objectively addition, subtraction, multiplication and division of halves, thirds and fourths.

Compound Numbers.—Dollars and cents used together in applied problems.

Teach cubic foot and linear mile.

Percentage.—100%, 50% and 10% taught objectively; use both fractional and decimal forms.

Processes.—Addition of two or more numbers of two periods each; column addition of four figures.

Subtraction with reduction, using numbers of two periods.

Multiplication, multiplier containing two figures.

Short division completed.

Make statements for problems.

See detailed course.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY.—Structure—Forms of land and water—island, continent, peninsula, isthmus, cape, lake, ocean, sea, gulf, bay, strait, harbor, plain, hill, valley, mountain, river-basin, river, spring, creek.

Detroit.—Map of city showing principal features.

Wayne County.—Map to scale showing townships, learn townships bordering on Detroit.

State of Michigan.—Parts, boundaries, surface, drainage, coastline, climate, vegetation, occupations of people, cities and railroads.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—In addition to exercises for B class, teach stepping exercise, alternate heel and toe raising, military salute and facings.

See detailed course.

The Teeth and Food:

1. Structure of teeth.
2. Kind of teeth—incisor, canine and molar. Lead children to discover that human body needs for its sustenance certain properties of various classes of food substances.
3. Importance of mastication.
4. Difference in structure of teeth of herbivorous, carnivorous and rodent animals.

Illustrations from chart.

WRITING.—Practice-book No. 1; pen and ink; copy-book No. 1.

First two weeks of term use drill exercise. Watch carefully all work done with pen. Do not require too much miscellaneous writing. Avoid working too slowly in practice books or too rapidly when doing other work, as writing spelling lessons. Write upper half of each page through copy-book by close of tenth week. Complete book nineteenth week.

Specimens at beglnning of each month.

MUSIC.—In addition to the work of the preceding term, keys of C, G, D and E studied. Let the work be a developing process, and keep close relationship between lessons, each being a step in advance of the last. Begin two part singing. The time should always be beaten steadily and the pnpils know with which beat the commencing note of each phrase or section is to be sung.

DRAWING.—No. 2 Drawing Book for pupils and Manual Part I, for teacher's use.

Special attention to views and appearances of models, pattern making and drawing of natural forms. Careful attention to pencil holding and movement.

Drawings large and free.

Much supplementary work on blackboard and paper should be required.

B CLASS—Fourth Grade.

LANGUAGE.—Hyde's Practical Lessons in English, lessons I to XXV inclusive.

Simple use of quotation marks.

Simple form for a letter.

Possessive forms of plural nouns ending in *s*.

Daily work in writing from dictation sentences containing the new words in spelling.

Careful attention to language used by pupils in all recitations, errors should be persistently corrected.

Daily work in written composition, have pupils reproduce the thought of the geography, history and reading lessons.

Special attention to the logical arrangement of the sentences in this composition work.

See detailed course in Language.

READING.—

Appleton's Third Reader, lessons XXVI to LI.
Barnes' Third Reader, lessons XXVI to XLI.
Seven Little Sisters, completed.

Supplemental work:

Our World Reader No. 1, pp. 1-35.
Book of Tales, completed.
Normal Course Third Reader, completed.

SPELLING.—See spelling manual for this grade.

Define, spell orally and write from dictation all words in grade vocabulary.

Special attention to the spelling of new words which occur in geography, number or drawing lessons.

NUMBERS.—Number work—Review all work in multiples and complete to 144. Daily work in oral applied problems.

Notation.—Read and write numbers through units of millions.

Fractions.—Develop terms numerator and denominator.

Teach objectively addition, subtraction, multiplication and divisions of halves, thirds and fourths and give written figure work for the same.

Compound Numbers.—Complete liquid measure. Teach cubic yard, also square rod. Review work of all preceding grades in compound numbers,

Percentage.—20%, 25%, and 75%. Use both fractional and decimal forms.

Processes.—Continue addition and subtraction.

Multiplication, multiplier containing three figures and multiplicand containing not more than three figures.

Long division, divisors not to exceed 30.

Statements for problems.

See detailed course.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY.—

Earth as whole:

1. Form.
2. Dimensions.
3. Measurements.
4. Daily and yearly motions.
5. Distribution of heat.
6. Winds.
7. Seasons.
8. Surface.

North America:

1. Location and boundaries.
2. Structure.
3. Drainage.
4. Outline.

See detailed course in geography for Fourth Grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Special attention to position of body in sitting, standing and walking.

Review work of Third Grade and introduce varied shoulder movements, leg, trunk and head exercises.

Walking and marching exercises as given in detailed course.

The Blood:

1. The use of blood in conveying nourishment to the tissues.
2. Differences in color of pure and impure blood.
3. Effects of exercise and respiration upon the blood.
4. Treatment of injuries to the blood vessels.

Illustrations from charts.

WRITING.—Practice-book No. 2. Copy-book No. 2.

First two weeks of term use drill exercise. Write upper half of each page, through copy-book by close of 10th week. Complete book by close of 19th week. Mark each page of copy-book when the page is finished. Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

MUSIC.—Review the work of the preceding classes. Try to select exercises and songs to illustrate previous drill in tune and time.

Test exercises, page 165, New Second Music Reader, os. 1 to 13, boys and girls should alternate in reading nd singing the exercises; afterwards individual pupils ıould be called upon to sing them.

DRAWING.—No. 3 Drawing Book for Pupils, Prang's omplete Course Manual, Part II, for teacher's use.

Drill exercises in pencil holding and movement.

Continued attention to views and appearances.

Grouping of objects and drawing.

Units of designs carefully explained.

Historic ornaments. Memory exercise.

Paper cutting and pasting of decorative forms.

A CLASS—Fourth Grade.

LANGUAGE.—Hyde's Practical Lessons in English, o. 1, Part I, completed.

Review work of preceding grade.

Possessive form, singular and plural nouns. Avoid ɔecial difficulties.

Daily work in writing from dictation sentences con- ining new words in the spelling lesson.

Careful attention to language used by pupils in all citations, errors should be persistently corrected.

Daily work in written composition, have pupils repro- ıce the thought of the history, reading and geography ssons.

Special attention to the logical arrangement of the ntences in this composition work.

In connection with the reading in history learn Longfellow's Paul Revere's Ride. Copy it, noticing that it is divided into stanzas and that the first word of every line begins with a capital. Have pupils reproduce the thought of this poem in their own language in the form of a composition.

See detailed course in Language.

READING.—

Appleton's Third Reader, completed.
Barnes' Third Reader, completed.
Stories of American History, completed.

Supplemental work:

Our World Reader No. 1, pp. 205-254.
Scribner's Geographical Reader, North America.
Ten Boys on the Road From Long Ago.

SPELLING.—Vocabulary—see spelling manual for this grade.

Spell and define all words in grade vocabulary.

Special attention to the spelling of geographical terms, also other new words as they occur in any lesson.

NUMBERS.—Review multiple work. Daily oral work in applied problems.

Notation.—Read and write numbers of three periods.

Fractions.—Addition, subtraction, multiplication and division of all fractions through twelfths and written figure work for the same.

Compound Numbers.—Avoirdupois weight completed.

Teach reduction of compound numbers to a higher or lower denomination, and use all compound numbers

taught in preceding grades in problems involving *one* reduction.

Percentage.—16⅔%, 33⅓% and 12½%. Use all rates previously taught.

Interest.—Simple interest, 6% time expressed in years.

Processes.—Addition, subtraction and multiplication continued.

Long division continued, divisors containing not more than three figures.

Teach simple form of bill.

Make statements for problems.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY.—Review B Fourth work.

North America:

1. Structure.
2. Drainage.
3. Outline.
4. Climate.
5. Distribution of Vegetation.
6. Distribution of Animals.
7. Distribution of Minerals.
8. People.
9. Political Division.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercise same as for B class. Have pupils move with promptness and precision during exercises.

The Skin:

1. Structure and uses.
2. Uses of perspiration; effects if perspiratory glands are closed.
3. Effects of exercise upon the skin.
4. Hair and nails.
5. Bathing and care of skin.

The Clothing:

1. Value of cotton clothing; woolen.
2. Cleanliness and need of frequent changing.
3. Effects of tight closing.

Illustrations from chart.

WRITING.—Practice-book No. 2; Copy-book No. 2 B.

First two weeks of term drill exercises. Write upper half of each page through copy-book by close of 10th week. Complete book by close of 19th week.

Copy-book through page 10 by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

MUSIC.—In addition to the work of the preceding term, the division of the beat introduced. Class should practice all major scales. They should be able to sing chromatic scales.

DRAWING.—(Same as B Class, Fourth Grade.

B CLASS--Fifth Grade.

LANGUAGE.—Hyde's Practical Lessons in English, No. 1, Part II, Lessons I to XXV, inclusive. Review Part I.

Work in letter-writing continued.

Have pupils write the poem on page 80 from dictation, giving special attention to punctuation. Give other work of similar nature.

Careful attention to language used by pupils in all recitations; correct all mistakes.

Daily work in written reproduction of the thought of the reading, geography and history lessons.

In this written composition work pay special attention to paragraphing.

READING.—

Scribner's Geographical Reader—South America.
Our World Reader, No. 1—South America.
Familiar Animals and Their Wild Kindred, completed.
Hawthorne's Wonder Book, Part I.
Study of Hawthorne's Life.

SPELLING.—Careful attention to the spelling and meaning of new words in all lessons.

Reed's Word Lessons, lessons 1 to 52 inclusive. Special attention to the work in phonics and the diacritical markings of the letters, as given in these lessons.

ARITHMETIC.—Notation and numeration of numbers through three periods.

United States:

1. Location and boundaries.
2. Extent.
3. Advantages.
4. Population.
5. Education.
6. Religion.
7. Government.
8. History.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercise in ep breathing; effects on the body and practical uses of ep breathing.

Teach combined movements of the body and the arms. nee bending and all elementary exercises of Fourth rade in review.

See detailed course.

Exercise:

1. Benefits and effects of.
2. Value of out-door sports.

The Heart:

1. Functions.
2. Veins, arteries and capillaries.

Illustrations from chart.

WRITING.—Practice-book No. 2. Copy-book No. 3.

First two weeks of term, movement drill exercises, ing muscular movement; be sure that all get the free, sy use of the forearm.

Write upper half of each page through copy-book by ose of tenth week.

Complete copy-book by close of nineteenth week.

glish,

to the

simple

ol.

in all

the

ther

osi-

ory—

ing and
ular les-

preceding
tention to

A CLASS—Fifth Grade.

LANGUAGE.—Hyde's Practical Lessons in English, ›mpleted and reviewed.

Letter-writing continued, special attention given to the ›dy of the letter.

How to write a receipt for money; also a simple ·omisory note.

Work in writing poems from dictation continued.

Careful attention to language used by pupils in all citations; errors should be persistently corrected.

Daily work in written composition. Reproduce the ıbstance of what has been read or taught in the other ssons.

Special attention to paragraphing in written composi-›n work.

READING.—

Scribner's Geographical Reader—Europe.
Our World Reader, No. 1—Europe.
Eggleston's First Book in American History—completed.
Hawthorne's Tanglewood Tales.
Study of Hawthorne's Life.

SPELLING.—Careful attention to the spelling and ıeaning of all new words which occur in the regular les-›ns in other branches.

REED'S WORD LESSONS.—Review work of preceding rade and advance to lesson 85; special attention to honics and diacritical marks.

WRITING.—Practice-book No. 2. Copy-book No. 4.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week. Complete copy-book by close of nineenth week.

Mark each page of copy-book when page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Same as Class B. Also the class should be able to sing any piece in the Second Reader.

DRAWING.—No. 5 Drawing Book for Pupils. Prang's Complete Course Manual, Part II, for teacher's use.

More careful execution, better understanding of Principles required.

Views and appearances carefully understood.

Units of design for decorative purposes thoroughly considered.

Study of natural flowers for units of design.

Cutting and pasting of rosettes, on p. 18.

Historic ornaments. Memory exercise.

ARITHMETIC.—Common Fractions.

Review carefully all previous work and finish the subject of Common Fractions. Wentworth's Grammar School Arithmetic, pp. 111 to 147.

Compound Numbers.—Review the tables of Denominate Numbers, also reduction, ascending and descending, and use these in applied problems involving two reductions.

Decimals.—Thorough review of work of preceding grade.

Percentage.—Finish Percentage (without its varied applications), thorough drill in applied problems, use all four cases. Use decimal form for rates.

Interest.—Simple Interest, time expressed in years, months and days. Simple problems.

GEOGRAPHY.—Asia and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises as given in detailed course. Aim at quality rather than quantity in the regular daily drill. Caution pupils before beginning exercises against errors in the execution of the movements. Jerking and unnecessary twisting of the body should be avoided. Muscles should be under such control that directions will be carried out easily and effectively.

Digestion of Food:

1. Appearance of stomach before digestion, also during digestion.
2. Circumstances which affect digestion.
3. Kinds of food and value of a mixed diet.
4. Effects of alcohol on the stomach.

A CLASS—Sixth Grade.

LANGUAGE.—Agreement of subject noun and predicate verb.

Teach common proof-marks, use these in indicating corrections in pupil's work.

Nouns and verbs having like pronunciation distinguished.

Modified subject and analysis of simple sentences containing modified subjects.

Definition, comparison, choice and arrangement of adjectives.

Modified predicate and analysis of simple sentences containing modified predicates.

Definition, comparison and use of adverbs.

Review of parts of speech.

Use Reed and Kellogg's One Book Course in English. Lessons 19 to 36 inclusive in connection with topics studied. Review B, sixth work.

Have the pupils reproduce in writing the substance of the geography, history and reading lessons. Develop a whole chapter or topic in one composition.

The language period for at least two days in the week should be devoted to composition work.

READING.—

Scribner's Geographical Reader—Africa and Australia.
Our World Reader, No. 1—Africa and Australia.
Tompkinson's Life of Franklin.
Foster's Life of Abraham Lincoln.
Courtship of Miles Standish.
Study of Longfellow's Life.

Addition, subtraction, multiplication and division with common proofs and names for terms.

Fractions.—Review all previous work.

Teach reduction to a common denominator, obtain common denominator by inspection.

Give abundant exercise in addition, subtraction, multiplication and division of fractions, having both like and unlike denominators through twentieths.

Compound Numbers.—Review tables of denominate numbers previously taught and use these compound numbers in applied problems. Teach reduction descending and ascending, no problem to contain more than three denominations.

Decimals.—Addition, subtraction, multiplication and division of decimals.

Give only simple problems. In division of decimals place the quotient above the dividend and make the divisor a whole number.

Percentage.—Use rates already given in applied problems in first case.

Interest.—Simple interest, time expressed in years.

Sample form of bill.

Make statements for problems.

Wentworth's Grammar School Arithmetic, pp. 1 to 75 inclusive.

GEOGRAPHY.—South America and review. See detailed course for this grade.

United States:

1. Location and boundaries.
2. Extent.
3. Advantages.
4. Population.
5. Education.
6. Religion.
7. Government.
8. History.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercise in deep breathing; effects on the body and practical uses of deep breathing.

Teach combined movements of the body and the arms. Knee bending and all elementary exercises of Fourth Grade in review.

See detailed course.

Exercise:

1. Benefits and effects of.
2. Value of out-door sports.

The Heart:

1. Functions.
2. Veins, arteries and capillaries.

Illustrations from chart.

WRITING.—Practice-book No. 2. Copy-book No. 3.

First two weeks of term, movement drill exercises, using muscular movement; be sure that all get the free, easy use of the forearm.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Write three pages in practice-book to one in copy-book.

Mark each page of copy-book when the page is finished.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Pupils of this grade should understand the signatures of all the major keys. Pupils should be able to write correctly all scales. Test exercises, pages 167, 168, 169. Second Music Reader, beating time; Time, names and singing. More varieties of time. Begin drill in steps and half-steps.

DRAWING.—No. 4 Drawing Book for Pupils. Prang's Complete Course Manual, Part II, for teacher's use.

Careful and continued attention to the three subjects—Construction, Representation and Decoration, with better comprehension of principles and more careful execution.

Special and repeated drill in observing the appearances of rectangular objects and the representation of them.

Historic ornaments. Memory exercise.

Study of natural flowers for decorative purposes.

Paper cutting and pasting rosettes.

A CLASS—Fifth Grade.

LANGUAGE.—Hyde's Practical Lessons in English, completed and reviewed.

Letter-writing continued, special attention given to the body of the letter.

How to write a receipt for money; also a simple promisory note.

Work in writing poems from dictation continued.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

Daily work in written composition. Reproduce the substance of what has been read or taught in the other lessons.

Special attention to paragraphing in written composition work.

READING.—

Scribner's Geographical Reader—Europe.
Our World Reader, No. 1—Europe.
Eggleston's First Book in American History—completed.
Hawthorne's Tanglewood Tales.
Study of Hawthorne's Life.

SPELLING.—Careful attention to the spelling and meaning of all new words which occur in the regular lessons in other branches.

REED'S WORD LESSONS.—Review work of preceding grade and advance to lesson 85; special attention to phonics and diacritical marks.

ARITHMETIC.—Greatest Common Measure, Least Common Multiple and Cancellation. Wentworth's Grammar School Arithmetic, pp. 98 to 111. Omit exercise 67 until A Sixth.

Fractions.—All operations, denominators not to exceed 144.

Compound Numbers.—Continue the work of the preceding grade. Teach thoroughly the subtraction of dates to determine length of time.

Decimals.—Finish this subject, omitting all puzzling and difficult examples. Give abundant simple practice. Wentworth's Arithmetic, pp. 76 to 98.

Percentage.—Teach each case, using rates already mentioned. Use decimal form.

Interest.—Simple interest, time expressed in years and months.

GEOGRAPHY.—Europe and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises same as for B Class. In marching, the movements should be made with reference to military precision, thus securing an erect and proud carriage of the body. See detailed course.

Special Senses:

1. Location and use.
2. Care and protection.

The Bones:

1. Structure, composition and use.
2. Name of principal divisions of skeleton, number of bones in each division.
3. Different kinds of joints.

Illustrations from chart.

WRITING.—Practice-book No. 2. Copy-book No. 4.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week. Complete copy-book by close of nineteenth week.

Mark each page of copy-book when page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Same as Class B. Also the class should be able to sing any piece in the Second Reader.

DRAWING.—No. 5 Drawing Book for Pupils. Prang's Complete Course Manual, Part II, for teacher's use.

More careful execution, better understanding of Principles required.

Views and appearances carefully understood.

Units of design for decorative purposes thoroughly considered.

Study of natural flowers for units of design.

Cutting and pasting of rosettes, on p. 18.

Historic ornaments. Memory exercise.

B CLASS—Sixth Grade.

LANGUAGE.—Kinds of sentences and rules for the punctuation of each kind. Parts of sentences, subject and predicate. Analysis of short, simple sentences.

Forms of names, how to write them; also how to abbreviate them.

Letter-writing continued. How to write a receipt for money; also a promissory note. Teach form and meaning of a check.

Use Reed and Kellogg's One Book Course in English, lessons 1 to 18 inclusive, in connection with topics studied.

Careful attention to language used by pupils in all recitations.

For Composition Work have pupils reproduce in writing the substance of the lessons in Geography, History and Reading. Special attention to paragraphing.

The language period for at least two days in the week should be devoted to work in composition.

READING.—

Scribner's Geographical Reader—Asia.
Our World Reader, No. 1—Asia.
Living Creatures of Water, Land and Air—completed.
Hiawatha. Study of Longfellow's Life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons.

Use dictionaries, and teach pupils to find meaning and pronunciation of words.

Reed's Word Lessons, lessons 85 to 116 inclusive.

ARITHMETIC.—Common Fractions.

Review carefully all previous work and finish the subject of Common Fractions. Wentworth's Grammar School Arithmetic, pp. 111 to 147.

Compound Numbers.—Review the tables of Denominate Numbers, also reduction, ascending and descending, and use these in applied problems involving two reductions.

Decimals.—Thorough review of work of preceding grade.

Percentage.—Finish Percentage (without its varied applications), thorough drill in applied problems, use all four cases. Use decimal form for rates.

Interest.—Simple Interest, time expressed in years, months and days. Simple problems.

GEOGRAPHY.—Asia and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises as given in detailed course. Aim at quality rather than quantity in the regular daily drill. Caution pupils before beginning exercises against errors in the execution of the movements. Jerking and unnecessary twisting of the body should be avoided. Muscles should be under such control that directions will be carried out easily and effectively.

Digestion of Food:

1. Appearance of stomach before digestion, also during digestion.
2. Circumstances which affect digestion.
3. Kinds of food and value of a mixed diet.
4. Effects of alcohol on the stomach.

5. Effects of tobacco on the stomach.
6. Waste and repair of the tissues.

Illustrations from chart.

WRITING.—Practice-book No. 3. Copy-book No. 5.

First two weeks of term, muscular movement exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—This class should begin third series of charts. They should be taught to know the intervals to the extent of major and minor seconds and thirds, perfect and augmented fourths and perfect and diminished fifths. Difficult modulation. Gradually introduce all varieties of time.

DRAWING.—(Same as A Class, Fifth Grade.)

A CLASS—Sixth Grade.

LANGUAGE.—Agreement of subject noun and predicate verb.

Teach common proof-marks, use these in indicating corrections in pupil's work.

Nouns and verbs having like pronunciation distinguished.

Modified subject and analysis of simple sentences containing modified subjects.

Definition, comparison, choice and arrangement of adjectives.

Modified predicate and analysis of simple sentences containing modified predicates.

Definition, comparison and use of adverbs.

Review of parts of speech.

Use Reed and Kellogg's One Book Course in English. Lessons 19 to 36 inclusive in connection with topics studied. Review B, sixth work.

Have the pupils reproduce in writing the substance of the geography, history and reading lessons. Develop a whole chapter or topic in one composition.

The language period for at least two days in the week should be devoted to composition work.

READING.—

Scribner's Geographical Reader—Africa and Australia.
Our World Reader, No. 1—Africa and Australia.
Tompkinson's Life of Franklin.
Foster's Life of Abraham Lincoln.
Courtship of Miles Standish.
Study of Longfellow's Life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries and learn to find pronunciation and meaning of words.

Reed's Word Lessons, lessons 117-148 inclusive.

ARITHMETIC.—Common Fractions—Review and make a wide and varied application of fractions to practical business problems. Wentworth's Arithmetic, pp. 147 to 155. Selections from other authors.

Compound Numbers.—All operations. Wentworth's Arithmatic, pp. 155 to 171. Carpeting, papering and plastering.

Decimals.—Review, drill thoroughly on the figure work after the reasons are clearly understood.

Percentage.—Application to Profit and Loss. Use great variety of simple problems.

Interest.—Simple interest, time in years, months and days.

GEOGRAPHY.—Africa, Australia and Oceanica.

See detailed course for this grade. Review.

PHYSICAL CULTURE AND PHYSIOLOGY.—Continue movements of arms and feet. Body twisting and arm stretching. Review elementary exercises, aiming at promptness and grace in execution.

See detailed course.

The Brain:

1. Situation, structure and use.
2. The nervous system; likened to a telegraphic system of communication. The brain, the central office, from which radiate the lines or nerves that carry messages to and from all parts of the body, thus directing all movements of the muscles.

Illustrations from charts.

WRITING.—Practice-book No. 3. Copy-book No. 6.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page of copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—A, E, B, minor scales. Chromatic scale. Practice singing accidentals.

DRAWINGS.—No. 6 Drawing Book for Pupils. Preliminary Manual for teacher's use.

Broader scope of work; better understanding of principles and their application; better execution and more independent work from pupils.

Views and appearances of rectangular objects at different angles.

Special attention to appearances. Thorough instruction and careful study must be given.

Historic ornaments. Memory exercise.

Decorative design. Borders.

Working drawings, figured.

B CLASS—Seventh Grade.

LANGUAGE.—Phrase modifiers, analysis of simple sentences containing phrase modifiers. Arrangement and punctuation of phrase.

Compound subject and compound predicate; connection, punctuation and agreement.

Use of preposition, conjunction and interjection.

Special work in business forms and business correspondence.

Use Reed and Kellogg's One Book Course in English Lessons, pp. 37 to 47 inclusive, in connection with topics studied. Daily reproduction of substance of Geography, History and Reading lessons.

The language period for at least two days in the week should be devoted to work in composition.

Special attention to paragraphing and logical development of thought in compositions.

READING.—

Kellogg's First Book in Physiology and Hygiene.
Birds and Bees and Sharp Eyes.—Jno. Burroughs.
Snow Bound and Among the Hills.—Whittier.
Study Whittier's Life.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries. Reed's Word Lessons, lessons 149 to 180 inclusive.

ARITHMETIC.—Common Fractions.—Thorough review of the entire subject.

Compound Numbers.—Wentworth's Arithmetic, pp. 171 to 203. Connect the study of Longitude and Time with the review of Mathematical Geography.

Decimal Fractions.—Review,

Percentage.—Review Profit and Loss. Teach Commission and Brokerage, Insurance, Taxes and Duties. Wentworth's Arithmetic, pp. 203 to 225. Use simple problems.

Interest.—Simple Interest, completed. Wentworth's Arithmetic, pp. 225 to 233.

GEOGRAPHY.—Earth as a Whole.—Review

1. Structure.
2. Drainage.
3. Outline.
4. Climate.
5. Vegetation.
6. Animals.
7. Minerals.
8. People.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY.—Exercises of preceding grade in different combinations, facings and salutes. See detailed course. Topic for essay: The Olympian Games.

Read Kellogg's First Book in Physiology and Hygiene. Each lesson in this subject should be preceded by a clear and thorough explanation, and followed by such questions and talks as will insure a full understanding of the subject matter by the pupils.

WRITING.—Practice-book No. 3. Copy-book No. 7.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC.—Review Sixth Grade work, and take a little in advance. Pupils shall acquire one additional song in each major key.

DRAWING.—No. 7 Drawing Book for Pupils. Preliminary Manual for teacher's use.

Work is both free-hand and instrumental.

Instrumental and free-hand drawing *must* be kept entirely *distinct*.

Constant drill on free curved movement.

Draw table line when appearance of object is given. Blackboard drawing.

Teach and practice carefully, measuring by pencil in space.

No instrumental work except in construction.

Representation *must* be free-hand. Independent work required.

Representation.—Appearance of form. Picture drawing.

Effect of position and distance.

Objects must not be moved while drawings are being made. Pupils must keep their same positions and look persistently in one direction until the exercise is finished.

Pupils *must* understand the principle and methods given in Manual, pages 28 and 29.

Handle cube and square prism above as well as below the eye.

Models must be made for pupils to study from.

Observation of models by the class as a unit, cannot be practiced according to stated conditions with only one model in the hands of the teacher.

Level of the eye, convergence of receding edges, foreshortening of surfaces when viewed obliquely, must be carefully studied.

Decoration.—Study of bi-lateral units adapted to surface designs; Application of units to borders.

Historic ornaments, Greek, Moorish and Gothic styles. Connect some story of history or myth of literature with the drawing.

Teach the derivation of the ornament, and how used.

Pupils should be required once a week to make or cut in any material, as paper, wood, clay or plaster, the geometric forms and objects drawn in these books. Picture making or the study of plant forms may be alternated with cutting and making.

Collections of pupil's work in drawing and made-work should be called for each term.

A CLASS—Seventh Grade.

LANGUAGE.—Object and attribute complements, analysis of simple sentences containing object and attribute complements.

Nominative and objective forms of pronouns, office of each.

Noun modifiers, possessive and explanatory.

Infinitive and principles, avoid difficult constructions.

Business correspondence, notes, checks and receipts.

Notes of invitation, acceptances, regrets, etc.

Use Reed and Kellogg's One Book Course in English, lessons 48 to 60 inclusive, in connection with topics studied. Review previous courses.

Continue work in reproduction of history, geography and reading lessons. Aim for correct and rapid writing, limit the time; allow for this work in reproduction.

Work for logical development and clearness of statement in composition work, Devote at least two language periods each week to composition writing.

Review the topics as they are completed in the different studies by means of these written compositions.

READING.—

A History of the United States and its People.—Eggleston.

Grandmother's Story of Bunker Hill and other Poems.—Holmes.

Study of Holmes' Life.

Christmas Carol.—Dickens.

SPELLING.—Careful attention to spelling and meaning of new words in all lessons. Have pupils make daily use of dictionaries.

Reed's Word Lessons, lessons 181 to 212 inclusive.

ARITHMETIC.—Practical problems involving a review of Common and Decimal Fractions and Compound Numbers.

Trade Discount.—Explain clearly the nature and purpose of Commercial Discount. Give abundant exercise in great variety of problems. Wentworth's Arithmetic, pp. 238 to 240. Use other authors.

Review Percentage, Profit and Loss, Commission and Brokerage, and Taxes and Duties.

Interest.—Teach Compound Interest, and review Simple Interest. Omit Annual Interest. Wentworth's, pp. 243 to 246.

Simple Proportion.—Develop the principals of Simple Proportion. Finish the subject as presented in Wentworth's Arithmetic, pp. 254 to 260.

GEOGRAPHY.—Political geography.

See detailed course.

1. Political divisions.
2. Government.
3. Religion.
4. Occupations.
5. Commerce.
6. Special study of Michigan.
7. Review of United States.

8. Special study of Great Britain, Germany, Russia, France, Turkey, India, China, Japan, Egypt and Brazil.

PHYSICAL CULTURE.—Review first series. Teach difference between Swedish and American military facings.

See detailed course.

Topic for essay: The Education of the Spartan Youths.

WRITING.—Practice-book No. 13.

First two weeks of term, muscular movement drill exercises.

Miscellaneous writing, Notes, Receipts, Orders, Drafts, Checks, Business Letters, etc.

Specimens at the beginning of each month.

Give frequent tests of speed.

MUSIC.—Same as Class B.

DRAWING.—(Same as B Class, Seventh Grade.)

B CLASS—Eighth Grade.

LANGUAGE.—Teach the kinds of sentences; simple, mpound and complex; also the different kinds of clauses.

Avoid involved constructions. Teach how to com- ne statements.

Classes of nouns, pronouns, verbs, adjectives, adverbs id conjunctions. Use Reed and Kellogg's One Book ɔurse in English. Lessons 75 to 84 inclusive, in connec- ɔn with topics studied. Review briefly previous course.

Continue business forms, special attention to form of aft.

Continue work in reproduction of lessons in History, eography, Reading, etc.

Thought analysis of written composition, take selec- ɔns which are read, notice how the thoughts are grouped id arranged into paragraphs, finds heads for paragraphs, ake a synopsis of the whole composition.

Before writing an original composition construct a amework for the same, learn to develop a theme logi- lly.

About half the language time should be given to this ork in composition. Train pupils to express themselves early and rapidly in written language.

READING.—

Evangeline.—Longfellow.

Sketch Book.—Irving.

A study of Irving's Life.

Reading of poems commemorating events in Revolutionary Period, connect reading with work in history.

Civics for Young Americans.—W. M. Giffin.

SPELLING.—Use dictionaries to find pronunciation and meaning of new words in all lessons.

Reed's Word Lessons, lessons 213 to 238 inclusive.

ARITHMETIC.—Bank Discounts.—Teach this subject thoroughly. Wentworth's Arithmetic, pp. 233 to 237. Omit True Discount. Partial Payments is of less importance, and less time may be devoted to this subject.

Trade Discount.—Review this subject thoroughly.

Stocks, Bonds and Exchange.—Wentworth's Arithmetic, pp. 247 to 254.

Interest.—Thorough review, drill on shortest methods of making calculations.

Proportion and Partnership.—Wentworth's Arithmetic, pp. 254 to 266.

HISTORY AND GOVERNMENT.—

History and Government of the United States through the Revolutionary Period.

Barnes' Brief History and Government Manual.

PHYSICAL CULTURE.—Combine arm movements with body bendings. Teach stepping and swaying exercises.

See detailed course.

Importance of systematic exercise, effects of the same upon the brain.

Essay: Comparison and contrast of the education of Athenian and Spartan Youths.

WRITING.—Same as A, Seventh Grade.

MUSIC.—All major and minor scales understood. All difficulties in time understood at a glance. Three and four parts singing. Drill in exercises still necessary.

DRAWING.—No. 8 Drawing Book for Pupils. Preliminary Manual for teacher's use.

A collection of work, consisting of drawings and made-work should be called for each term in this grade.

Construction.—Geometric views, working drawings, developments of patterns, sections, problems in plane geometery, drawing to a scale.

Work both free-hand and instrumental.

Three dimensions expressed by two or more drawings.

Dotted lines for transferring measurements, dash lines for invisible edges, dot and dash lines for centre lines, and full lines for all outlines and visible edges.

Result lines in geometric work should be uniform, sharp black lines.

In instrumental drawing there should be no erasing, no peacing or patching of lines.

When pupils change from free-hand to instrumental work, teachers must see that the sharpening of pencils is changed to a wedge shape.

Representation.—Appearance of form, composition, foilage from nature, effect of position and distance, con-

vergence of receding edges of lines, foreshortening of surfaces, the level of the eye considered. All work must be free-hand, and new principles should be studied at blackboard before drawing in books; gradation of lines to represent nearness and distance.

The three dimensions expressed in one drawing.

Pupils must be taught how to look at things.

Objects must not be moved while drawing.

Pupils must not change their position, but look persistently in one direction until the drawing is finished.

The principles of the perpective given on pages 28 and 29 of Manual should be carefully developed.

Teach the terms horizon line, vanishing point. Edges must not coincide with each other, or with the table line. Continue to practice pencil measurement in space. Insist upon pupils sighting lengths and distances while drawing.

Frequent sketches of objects at home should be prepared by pupils.

Decoration.—Historic ornaments, Egyptian, Greek and Gothic styles; natural growth in plants for conventionalized units, modification of bi-lateral units by curves obtained from a study of nature, principles of decorative design, original arrangements.

Teachers must seek to make pupils conscious of the need of certain principles in good ornament in order to satisfy the eye.

In teaching historic ornament, awaken interest by relating, if possible, a story of history or myth of literature. Give the period of its use, and its location on map.

All good ornament possesses:

1. Order, which is produced by arrangement of parts.
2. Rhythm, which is produced by repetition of parts.
3. Symmetry, which is produced by balance of parts.
4. Proportion, which is produced by inequality of parts.
5. Contrast, which is produced by variety of parts.
6. Intricacy, which is produced by subtlety of parts.
7. Breadth, which is produced by union of parts.
8. Stability, which is produced by union of parts.
9. Repose, which is produced by harmony of parts.

There are three original styles of ornament, all others are only modifications of these:

1, Egyptian; 2, Greek; 3, Saracenic.

A CLASS—Eighth Grade.

LANGUAGE.—Review capitalization and punctuation. Reed and Kellogg's One Book Course in English, lessons 122, 123 and 124.

Letter-writing reviewed and continued. One Book Course in English, pp. 286 to 292.

Modification of the parts of speech. Reed and Kellogg's One Book Course, lessons 85, 88, 90, 91, 92, 93, 98, 101, 102, 103 and 107.

Business correspondence and business forms reviewed and continued; advertisements, telegrams, etc.

Review work of Sixth, Seventh and B Eighth Grades. Much of this work can be done in connection with the study of suitable selections, classify the words and phrases, notice their use, etc. Use the text book for reference rather than for recitation.

Special attention given to work in composition in this grade.

Continue thought analysis of chosen selections.

Connect the work in original composition with the review of topics in history, government and literature.

READING.—

The American Citizen.—Dole.
Tales from Shakespeare, by Charles and Mary Lamb.
Merchant of Venice.

SPELLING.—Use dictionaries to find meaning and pronunciation of new words in all lessons.

Reed's Word Lessons. Lessons 239, 240, 241, 246, 247, 248, 253, 254, 255, 258, 259, 260, 265, 266, 267, 270, 271, 272, 273, 276, 277, 278, 279, 280, 285, 286, and 287, with a review of all that is possible of work of previous classes.

ARITHMETIC.—Square Root, Wentworth's Arithmetic, pp. 266 to 270.

Mensuration, pp. 278 to 292.

Miscellaneous problems and general review of entire course.

HISTORY AND GOVERNMENT.—History and Government of the United States, completed. Barnes' Brief History.

PHYSICAL CULTURE.—Exercises of second series and review of all movements of preceding grade.

See detailed course.

Essay: Educational Advantages of American Young People.

MUSIC.—Same as Class B.

DRAWING.—Same as Class B.

In conclusion I wish to commend the teachers and principals for the hearty co-operation manifested at all times, and particularly the special teachers in the stand taken in making their respective branches supplement and strengthen the work in the other subjects.

W. E. ROBINSON,
Supt. Schools.



❋ Report of the Secretary. ❋



REPORT OF THE SECRETARY.

To the Board of Education:

In compliance with the requirements of the rules of the Board I herewith submit my report for the fiscal year ending June 30, 1893, as follows:

1st. Financial statement, showing the receipt and disbursement of money.

2nd. A statement of expenditures by schools and for other purposes.

3rd. A recapitulation of the expenditures.

4th. A statement of the cost of free text books issued during the year.

5th. A descriptive list of the real estate owned by the Board.

6th. A schedule and appraisal of public school property on June 30, 1893.

FINANCIAL STATEMENT.

BUILDING FUND.

Receipts.

From balance June, 30, 1892	$	67,605 45
From Malcomson & Higginbotham, on account of over-payment		200 00
From interest on daily balances		970 68
Total	$	68,776 13

Disbursements.

For real estate	$	1,536 20
For new buildings		72,100 84
For furniture		1,755 85
For interest on overdraft		28 35
Total	$	75,421 24
Excess of disbursements over receipts June 30, 1893	$	6,645 11

REPAIR FUND.

Receipts.

From balance June 30, 1892	$	13,624 08
From city taxes, 1890-91		380 26
From city taxes, 1892		45,523 72
From primary school money		6,275 14
From interest on daily balances		1,055 06
Total	$	66,858 26

Disbursements.

For matertal	$	26,039 19
For labor		11,918 98
Total	$	37,958 17
Balance on hand June 30, 1893	$	28,900 09

SALARY FUND.

Receipts.

'rom city taxes, 1890–91	$	4,349 77
'rom city taxes, 1892		390,447 91
'rom primary school money		66,703 80
'rom interest on daily balances		6,707 15
'rom various refunds		9 50
Total	$	470,218 18

Disbursements.

or salaries of teachers	$	391,499 99
or salaries of janitors		35,665 71
or salaries of officers		9,833 32
or salaries of clerks		2,953 30
or repayment of overdraft in 1892		22,203 69
or interest on overdraft		20 38
Total	$	462,176 39
alance on hand June 30, 1893	$	8,041 74

GENERAL FUND.

Receipts.

rom balance June 30, 1892	$	3,924 87
rom city taxes, 1890–91		402 62
:om city taxes, 1892		55,539 23
rom primary school money		54,181 00
:om school districts partly annexed		2,336 27
:om transfer from book of reference fund		1,500 00
:om interest on daily balances		497 53
:om miscellaneous sources		215 55
Total	$	118,597 07

Disbursements.

For text books	$	28,201 45
For school supplies		7,532 80
For janitors' supplies		4,235 53
For fuel and lights		20 372 43
For furniture and repairs to same		7,082 96
For printing and stationary		3,481 83
For rent of offices and store-room		1,813 35
For census		2,356 41
For water rates on schools		1,071 00
For paving assessments		4,200 94
For sewer assessments		557 07
For street opening assessments		123 50
For fitting Beecher's Hall for High School		5,032 28
For insurance		225 00
For miscellaneous purposes		5,244 43
Total	$	91,530 98
Balance on hand June 30, 1893	$	27,066 09

BOOK OF REFERENCE FUND.

Receipts.

From balance June 30, 1892	$	1,231 17
From non-resident pupils for tuition		1,400 27
For interest on daily balances		49 23
Total	$	2,680 67

Disbursements.

For books of reference, High School	$	277 46
For binding books		70 50
For transfer to general fund		1,500 00
Total	$	1,847 96
Balance on hand June 30, 1893	$	832 71

SECRETARY'S CONTINGENT FUND.

Receipts.

From balance June 30, 1892	$ 200 00
Disbursements	None
Balance on hand June 30, 1893	200 00

BELLEFONTAINE SCHOOL.

Teachers	$	6,935 00
Janitor		660 00
Labor		280 95
Coal		235 57
Wood		10 00
Kindling		10 25
Water tax		20 00
Flag		4 90
Hardware		5 10
Tuning piano		1 50
Shades		19 73
Lumber		23 82
Architects		400 00
Total	$	8,606 82

BERRY SCHOOL.

Teachers	$	2,259 00
Janitor		362 00
Labor		106 73
Coal		316 32
Wood		19 50
Kindling		7 33
Supplies		5 00
Sundry expenditures		5 35
Tin work		11 12
Shades		84 18
Glass		1 27
Livery		4 50
Hose and matting		33 34
Halyards		1 80
Lumber		11 27
Hardware		1 92
Total running expenses from Feb. 1, 1893	$	3,230 63
(Paid on New Building)—		
Carpenter contract		11,077 00

Mason	11,688 50
Heating and ventilating	1,388 50
Furniture	1,752 13
Labor	1,028 55
Fittings	69 21
Lumber	52 80
Hardware	9 20
Surveying	6 00
Connections	10 00
Paints	30 00
Lateral sewer	233 53
Castings	44 50
Expressing	1 00
Crock	25
Total	$ 30,621 30

BISHOP SCHOOL.

Teachers	$ 14,951 89
Janitor	1,200 00
Labor	1,116 55
Coal	926 52
Wood	62 88
Kindling	16 12
Gas	80 10
Hardware	36 45
Fittings	12 74
Blacksmith	1 25
Gravel	71 24
Lumber	417 77
Plastering	88 00
Paving	399 64
Castings	78 00
Water tax	45 00
Flag	4 90
Shades	12 07
Tuning piano	3 00
Repairing walk	11 11
Halyards	5 00

Carpet		75 50
Expressing		50
Repairing boiler		284 68
Total	$	19,901 37

BROWNSON SCHOOL.

Teachers	$	3,414 13
Janitors		420 00
Labor		81 00
Coal		233 47
Wood		15 00
Kindling		8 79
Halyards		5 00
Water tax		20 00
Gravel		62 98
Paving		367 80
Lumber		3 74
Repairing water		2 50
Total	$	4,634 41

CAMPBELL SCHOOL.

Teachers	$	4,225 00
Janitor		420 00
Labor		150 65
Wood		156 00
Kindling		5 86
Water tax		12 00
Lumber		23 40
Flag		4 90
Hardware		3 60
Total	$	5,001 41

CASS SCHOOL.

Teachers	$	17,228 62
Janitor		1,500 00
Labor		693 60

Coal		163 80
Wood		25 00
Kindling		11 72
Lumber		17 28
Fittings		16 08
Tuning piano		3 50
Plastering		4 90
Gravel		72 59
Water tax		35 00
Tin work		18 46
Stone walk		320 36
Rent chairs		5 00
Repairing walks		21 23
Shades		82 45
Repairing clock		75
Oil		50
Hardware		8 35
Total	$	20,529 19

CHANEY SCHOOL.

Teachers	$	3,875 00
Janitor		420 00
Labor		107 13
Coal		192 66
Wood		15 00
Kindling		8 79
Hardware		11 80
Lumber		15 07
Water tax		18 00
Halyards		5 00
Repairing roof		51 59
Total	$	4,720 04

CLAY SCHOOL.

Teachers	$	5,767 50
Janitor		450 00
Labor		53 47

Coal		241 38
Wood		15 00
Kindling		13 19
Gravel		47 72
Water tax		25 00
Stone walk		132 00
Tuning piano		3 00
Shades		7 67
Fittings		11 72
Express		3 00
Disinfecting books		5 00
Total	$	6,865 65

CLINTON SCHOOL.

Teachers	$	5.035 00
Janitor		476 67
Labor		428 32
Coal		205 80
Wood		20 00
Kindling		11 72
Fittings		5 72
Hardware		4 63
Paving alley		191 58
Gravel		34 53
Water tax		16 00
Flag		4 90
Hose		6 00
Blacksmith		3 50
Repairing clock		1 00
Tuning piano		2 00
Negrosine		1 75
Oil		50
Paint		6 50
Lumber		50 39
Total	$	6,506 67

COLUMBIAN SCHOOL.

Carpenter	$	6,349 20
Mason		10,069 55
Heating and ventilating		2,943 25
Labor		999 55
Ventilating traps		7 00
Sleeve		10 00
Fittings		33 12
Lead		7 00
Total	$	20,418 67

COTTAGE GROVE SCHOOL.

Teachers	$	800 00
Janitor		150 00
Labor		86 56
Wood		33 63
Kindling		5 86
Hardware		2 75
Expressing		2 00
Tin work		52
Water tax		5 00
Insurance		3 75
Total	$	1,090 07

CRAFT SCHOOL.

Teachers	$	3,995 00
Janitor		496 00
Labor		618 10
Coal		289 69
Wood		15 00
Kindling		8 75
Fittings		63 65
Lumber		70 36
Hardware		10 33
Castings		28 00
Expressing		2 60

Water tax		16 00
Wheelbarrow		8 10
Shades		41 98
	$	5,663 60
Carpenter's contract		3,441 50
Mason's contract		1,822 82
Heating and ventilating		593 25
Furniture		501 20
Total	$	12,023 37

CUSTER SCHOOL.

Teachers	$	884 50
Janitor		180 00
Labor		67 10
Coal		37 28
Wood		7 50
Water tax		8 00
Sundry expenditures		80
Tin work		5 00
Crock		10 47
Lumber		9 10
Fittings		39
Halyards		1 80
Sewer		44 04
Total	$	1,255 98

DICKINSON SCHOOL.

Teachers	$	3,848 75
Janitor		540 00
Labor		97 56
Coal		226 82
Kindling		4 40
Opening Canfield avenue		60 00
Gravel		42 65
Water tax		16 00
Total	$	4,836 18

DUFFIELD SCHOOL.

Teachers	$	12,111 00
Janitor		980 00
Labor		130 98
Coal		693 47
Kindling		30 82
Lumber		46 47
Hardware		9 35
Sand		3 17
Cement		2 60
Water tax		40 00
Expressing		75
Heater		31 90
Tuning piano		1 50
Shades		88 28
Crayon		5 70
	$	14,176 02
(New Addition)—		
Contractor		5,136 57
Heating and ventilating		174 38
Furniture		307 37
Cleaning		20 62
Total	$	19,814 96

EVERETT SCHOOL.

Teachers	$	9,086 87
Janitor		720 00
Labor		340 91
Coal		345 27
Wood		20 00
Kindling		14 65
Lumber		20 94
Water tax		20 00
Flag		4 90
Gravel		31 90

Repairing stove		3 50
Shades		36 85
Halyar s		5 00
Total	$	10,650 84

FARRAND SCHOOL.

Teachers	$	4,450 00
Janitor		600 00
Labor		173 62
Coal		290 30
Wood		15 00
Kindling		8 79
Halyards		5 00
Sundry expenditures		85
Caskets		2 64
Water tax		12 00
Flag		4 90
Grate bars		7 95
Iron		3 01
Hose		6 13
Hardware		23 12
Shades		9 90
Chairs		7 84
Lumber		16 35
Total	$	5,637 40

FERRY SCHOOL.

Teachers	$	5,125 00
Janitor		540 00
Labor		226 95
Coal		283 95
Wood		15 00
Kindling		5 86
Hardware		2 22
Gravel		116 81
Lumber		3 85
Water tax		20 00

Flag		4 90
Blacksmith		1 75
Fittings		19 02
Tin work		3 00
Architects		300 00
Total	$	6,668 31

FIRNANE SCHOOL.

Teachers	$	3,660 00
Janitor		600 00
Labor		336 30
Coal		251 21
Wood		18 25
Kindling		19 09
Hardware		13 34
Fittings		15 51
Water tax		12 00
Lumber		8 45
Sundry expenditures		1 47
Total	$	4,931 62

FRANKLIN SCHOOL.

Teachers	$	4,117 75
Janitors		350 92
Labor		223 61
Coal		364 04
Wood		15 00
Kindling		5 86
Fittings		30 24
Hardware		2 00
Paving		444 76
Connection		14 00
Tin work		15 94
Water tax		12 00
Teachers' desks		24 00

Cement		12 12
Castings		3 50
Shades		20 32
Lumber		27 50
Total	$	5,683 56

GARFIELD SCHOOL.

Teachers	$	1,897 50
Janitors		306 00
Labor		152 23
Wood		97 50
Kindling		5 86
Lumber		90 24
Fittings		1 87
Hardware		12 08
Water tax		20 00
Flag		4 90
Paving		775 12
Shades		15 30
Iron		2 97
Total	$	3,371 56

GRATIOT SCHOOL.

Teachers	$	800 00
Janitor		150 00
Labor		301 91
Coal		28 75
Wood		15 20
Kindling		4 40
Lumber		57 73
Fittings		19 68
Hardware		16 39
Settlement district		235 62
Expressing		5 20
Flag		4 90
Halyards		60
Abstract title		17 60
Total	$	1,657 98

HANCOCK SCHOOL.

Teachers	$	8,225 00
Janitor		646 00
Labor		548 23
Coal		389 14
Wood		10 00
Kindling		13 19
Fittings		17 06
Hardware		13 80
Lumber		43 09
Water tax		24 00
Hose		12 00
Expressing		1 10
Rent of chairs		3 00
Shades		27 70
Wheelbarrow		5 50
Halyards		1 80
	$	9,980 61
(New Addition)—		
Carpenter contract		2,819 71
Mason contract		1,817 70
Heating and ventilating		548 97
Furniture		1,066 17
Total	$	16,233 16

HIBBARD SCHOOL.

Teachers	$	1,265 00
Janitor		240 00
Labor		170 80
Coal		85 95
Kindling		2 00
Repairing plaster		15 55
Hardware		7 66
Lumber		31 87
Repairing stoves		8 11
Tin work		23 12
Water tax		8 00

Repairing clock		1 00
Note and interest		530 00
Expressing		10 00
Insurance		45 00
Total	$	2,444 06

HICKEY SCHOOL.

Teachers	$	2,275 00
Janitor		360 00
Labor		142 78
Coal		120 85
Wood		13 25
Lumber		65 94
Hardware		2 35
Fittings		2 55
Sewer		205 52
Paving		318 24
Water tax		8 00
Flag		4 90
Shades		12 48
Sundry expenses		1 15
Total	$	3,533 01

HIGH SCHOOL.

Teachers	$	36,795 00
Janitor		1,500 00
Labor		325 83
Coal		1,049 11
Wood		100 50
Kindling		26 12
Electric current		488 12
Gas		132 88
A. Corbulle (old material)		100 00
Baptist Society (coal and janitor)		86 00
Books		1,015 19
Book binding		98 05
Brushes		7 34

Catalogue	302 25
Castings	1 00
Cleaning carpet	1 04
Cotton	13 84
Crockery	8 72
Drugs	88 93
Drug supplies, instruments, etc	447 12
Electric supplies	38 98
Express	3 30
Fittings	27 89
Graduating exercises	379 44
Glass	5 00
Hardware	15 87
Lathe	150 80
Lintels	7 80
Laundering towels	7 00
Lumber	26 95
Mason work	15 47
Motor, etc	93 40
Oil	12 50
Printing	323 44
Repairing boiler	5 65
Repairing electric appliances	2 75
Repairing plaster	9 85
Repairing skeleton	15 15
Repairing wires	4 87
Seeds	12 96
Science fund	349 19
Shades	40 26
Stationery	263 40
Supplies	46 37
Telephone	14 00
Towels	6 22
Water tax	35 00
Wheelbarrows	19 45
Total	$ 44,519 50

FITTING UP BIDDLE HOUSE.

Furniture	$	1,922 68
Labor		2,472 67
Lumber		802 25
Fittings		268 64
Hardware		359 78
Stoves		626 09
Wiring for electric lights		416 74
Repairing building		398 16
Plumbing		297 00
Plastering		115 10
Insurance		180 00
Paints		96 42
Glass		39 87
Tin work		19 65
Covering pipes		92 60
Mason work		33 20
Cotton		18 02
Plaster		13 20
Cleaning		10 00
Cleaning chimney		1 50
Freight		3 81
Express		1 43
Cord		8 80
Total	$	8,197 61

CENTRAL HIGH SCHOOL SITE.

Paid on contract for land	$	500 00
Excavation		525 00
Surveying		20 00
Labor		56 00
Total	$	1,101 00

HOUGHTON SCHOOL.

Teachers	$	9,459 00
Janitor		750 00
Labor		239 51
Coal		281 07
Kindling		16 12
Gas		17 30
Lumber		12 30
Fittings		42 95
Water tax		25 00
Tuning piano		1 50
Sundry expenditures		73
Iron		7 77
Total	$	10,844 25

HUBBARD SCHOOL.

Teachers	$	4,587 00
Janitor		420 00
Labor		41 48
Coal		163 72
Wood		7 50
Kindling		14 65
Hardware		2 35
Water tax		12 00
Flag		4 90
Shades		11 29
Tin work		19 95
Halyards		1 80
Total	$	5,286 64

IRVING SCHOOL.

Teachers	$	10,160 00
Janitor		715 33
Labor		463 19
Coal		586 98
Wood		15 75

Kindling		20 52
Fittings		6 01
Hardware		8 88
Lumber		45 34
Castings		34 93
Water tax		25 00
Flag		4 90
Stone walk		167 42
Shades		33 06
Repairing clock		1 25
Total	$	12,288 56

JACKSON SCHOOL.

Teachers	$	6,250 00
Janitor		540 00
Labor		91 37
Coal		316 14
Kindling		4 40
Gravel		63 00
Water tax		24 00
Flag		4 90
Repairing roof		3 99
Fittings		1 25
Abstract title		12 20
Lumber		7 00
Total	$	7,318 25

JEFFERSON SCHOOL.

Teachers	$	13,093 25
Janitor		980 00
Labor		481 10
Coal		420 53
Wood		20 00
Kindling		14 65
Hardware		8 36
Lumber		119 01
Gravel		62 33

Water tax		25 00
Stamp		8 00
Stationery and supplies		16 07
Wire guards		1 90
Heater		15 10
Paving		350 60
Shades		28 04
Sundry expenditures		1 85
Halyards		5 00
Tuning piano		1 50
	$	15,647 29
(New Addition)—		
Builder's contract		4,008 57
Heating and ventilating		200 62
Furniture		350 11
Cleaning		17 50
Total	$	21,124 09

JOHNSTON SCHOOL.

Teachers	$	2,240 00
Janitor		306 00
Labor		102 00
Coal		247 45
Wood		5 00
Kindling		5 86
Copperas		3 00
Water tax		8 00
Hardware		2 48
Machine work		4 50
Total	$	2,924 29

LINCOLN SCHOOL.

Teachers	$	4,900 00
Janitor		600 00
Labor		217 09
Coal		416 05

Wood		5 00
Kindling		8 79
Lumber		99 23
Hardware		8 32
Water tax		25 00
Fittings		1 71
Shades		8 52
Iron		2 28
Total	$	6,291 99

LIVERNOIS SCHOOL.

Teachers	$	1,150 00
Janitor		180 00
Labor		50 07
Wood		71 50
Kindling		4 40
Sundry expenditures		1 10
Water tax		5 00
Cleaning vault		24 00
Total	$	1,486 07

McKINSTRY SCHOOL.

Teachers	$	4,291 25
Janitor		540 00
Labor		614 11
Coal		291 54
Wood		22 00
Hardware		13 14
Electric current		37 63
Lumber		23 33
Vent trap		7 00
Castings		28 00
Fittings		39 79
Tin work		7 52
Water tax		16 00

Wheelbarrow		8 10
Glass		1 61
	$	5,941 02
(New Addition)—		
Builder's contract		2,726 9
Heating and ventilation		2,400 00
Total	$	11,067 11

MIAMI SCHOOL.

Teachers	$	4,500 00
Janitor		820 00
Labor		54 35
Coal		292 92
Wood		20 00
Kindling		13 19
Gas		122 40
Laundering		16 50
Telephone		42 00
Hardware		15 65
Car tickets		11 00
Widening Randolph street		8 50
Directory		6 00
Water tax		50 00
Brushes		8 75
Duster		1 90
Towels		8 10
Chairs		14 55
Shades		1 80
Repairing stoves		1 50
Repairing tank		6 55
Total	$	6,015 71

NEWBERRY SCHOOL.

Teachers	$	7,322 50
Janitor		720 00

Labor		619 52
Coal		379 93
Wood		15 00
Kindling		4 40
Electric current		58 60
Lumber		69 19
Hardware		10 12
Tin work		1 95
Fittings		111 45
Castings		42 00
Sewer		157 02
Sundry expenditures		3 53
Repairing roof		25 70
Water tax		20 00
Wheelbarrow		3 50
Flag		4 90
Shades		2 04
Tuning piano		1 50
Recording deed		75
	$	9,573 60
(New Addition)—		
Builder's contract		4,048 50
Heating and ventilating		3,450 00
Cleaning		7 50
Total	$	17,079 60

NICHOLS SCHOOL.

Teachers	$	4,837 50
Janitor		420 00
Labor		104 75
Coal		161 85
Wood		15 00
Kindling		11 72
Halyards		5 00
Gravel		54 44
Water tax		12 00
Hardware		4 50
Lumber		6 00

Sundry expenditures		3 33
Machine work		6 46
Total	$	5,642 55

NORVELL SCHOOL.

Teachers	$	8,323 75
Janitor		750 00
Labor		191 15
Coal		646 79
Kindling		11 72
Fittings		8 94
Halyards		10 00
Castings		22 43
Repairing walls		46 95
Water tax		24 00
Sundry repairs		4 00
Shades		41 77
Tuning piano		3 00
Galvanized iron		24 25
Hardware		5 20
Total	$	10,113 95

OAKLAND SCHOOL.

Janitor	$	7 50
Labor		4 39
Total	$	11 89

JOHN OWEN SCHOOL.

Teachers	$	5,677 50
Janitor		650 00
Labor		332 54
Coal		193 22
Kindling		14 65
Fittings		3 12
Castings		32 50

Gravel		59 01
Water tax		16 00
Flag		4 90
Sundry expenditures		1 25
Iron		5 91
Shades		35 78
Lumber		7 00
Total	$	7,033 38

PALMER SCHOOL.

Teachers	$	4,880 50
Janitor		540 00
Labor		186 45
Coal		243 72
Wood		15 00
Kindling		11 72
Piano cover		3 50
Gravel		55 84
Opening Beaubien street		45 00
Water tax		20 00
Sundry expenditures		2 90
Lumber		4 05
Wheelbarrow		8 10
Tuning piano		2 00
Bell		10 00
Extra help		11 00
Total	$	6,039 78

PITCHER SCHOOL.

Teachers	$	8,042 75
Janitor		750 00
Labor		206 46
Coal		370 29
Wood		20 00
Kindling		16 12
Sundry expenditures		3 05
Repairing boiler		131 09

Water tax	24 00
Flag	4 90
Repairing plaster	9 55
Copperas	3 42
Shades	10 48
Repairing roof	7 47
Lumber	6 22
Fittings	1 47
Tuning piano	1 50
Total	$ 9,608 77

POTTER SCHOOL.

Teachers	$ 3,197 00
Janitor	420 00
Labor	38 62
Coal	175 18
Wood	10 00
Kindling	10 25
Flag	4 90
Lumber	2 91
Water tax	18 00
Fittings	1 94
Total	$ 3,878 80

PULFORD AVENUE SITE.

Paid on account	$ 500 00
Architects	200 00
Total	$ 700 00

ROBERTS SCHOOL.

Teachers	$ 4,412 50
Janitors	540 00
Labor	29 9
Coal	246 06
Wood	10 00

Kindling		8 79
Paving		287 72
Water tax		20 00
Flag		4 90
Recording deed		75
Total	$	5,560 68

M. M. ROSE SCHOOL.

Teachers	$	800 00
Janitor		150 00
Labor		118 02
Wood		35 75
Kindling		5 86
Hardware		6 89
Lumber		66 43
Water tax		6 00
Flag		4 90
Sundry expenditures		7 00
Tin work		10 75
Mason work		4 75
Total	$	1,216 35

RUSSELL SCHOOL.

Teachers	$	4,311 25
Janitor		540 00
Labor		212 02
Coal		260 29
Wood		15 00
Kindling		13 19
Gravel		88 15
Water tax		16 00
Sundry expenditures		3 35
Total	$	5,459 25

TAPPAN SCHOOL.

Teachers	$	11,821 87
Janitor		1,080 00
Labor		376 11
Coal		585 92
Wood		20 00
Kindling		16 12
Hardware		23 32
Fittings		50 20
Blacksmith		15 35
Repairing plaster		20 78
Lumber		90 54
Repairing boiler		57 37
Tin work		9 40
Covering pipe		12 82
Water tax		35 00
Flag		4 90
Repairing roof		56 57
Tuning piano		3 00
Repairing walls		6 00
Repairing clock		1 00
Architects		250 00
Total	$	14,016 27

TILDEN SCHOOL.

Teachers	$	9,095 75
Janitor		720 00
Labor		178 27
Coal		337 65
Wood		15 00
Kindling		14 65
Water tax		25 00
Gravel		72 59
Sundry expenditures		1 63
Opening Langley avenue		10 00
Hardware		11 60
Lumber		4 77
Total	$	10,486 91

TRAINING SCHOOL.

Teachers	$	6,060 00
Graduating exercises		93 90
Stationary		9 06
Piano		200 00
Tuning piano		3 50
Printing		4 50
Stamps		75
Books		25 40
Total	$	6,397 11

TROWBRIDGE SCHOOL.

Teachers	$	9,145 25
Janitor		720 00
Labor		183 54
Coal		378 41
Wood		15 00
Kindling		11 72
Gravel		116 64
Water tax		15 00
Tin work		3 00
Lumber		7 00
Total	$	10,595 56

VAN DYKE SCHOOL.

Teachers	$	5,481 86
Janitor		540 00
Labor		37 45
Coal		317 91
Wood		15 00
Kindling		8 79
Water tax		16 00
Sundry expenditures		2 09
Hardware		5 72
Tin work		4 00
Total	$	6,428 82

VAN DYKE AVENUE SITE.

Paid on account	$	500 00
Architects		250 00
Total	$	750 00

WASHINGTON SCHOOL.

Teachers	$	9,772 50
Janitor		720 00
Labor		945 53
Coal		361 18
Wood		20 00
Kindling		10 26
Electric current		74 95
Lumber		278 08
Hardware		25 76
Fittings		8 80
Repairing plaster		165 00
Tin work		17 81
Flag		4 90
Cleaning		23 00
Water tax		25 00
Tuning piano		3 50
Gravel		4 79
Cord		35
Wire guards		7 05
Shades		43 26
Galvanized iron		25 76
	$	12,537 48
(Heating System)—		
Builder's contract	$	1,776 40
Heating and ventilating		2,200 00
Total	$	16,513 88

WEBSTER SCHOOL.

Teachers	$	14,387 50
Janitor		1,200 00
Labor		392 26
Coal		450 37
Kindling		5 86
Lumber		45 61
Repairing boiler		45 01
Fittings		13 60
Sundry expenditures		4 48
Paving		577 92
Lawn mower		6 67
Slated paper		48 75
Tin work		53 95
Cotton		2 50
Water tax		36 00
Hose		12 00
Flag		4 94
Rent of chairs		8 00
Iron		5 52
Repairing plaster		7 80
Shades		47 50
Tuning piano		1 50
Crayon		5 70
Binding books		1 25
Total	$	17,364 65

WILKINS SCHOOL.

Teachers	$	9,415 75
Janitor		720 00
Labor		282 89
Coal		342 92
Wood		36 50
Kindling		16 12
Gravel,		25 91
Water tax		25 00
Stone walk		131 34
Sundry expenditures		1 85

Shades	12 34
Desk	24 00
Hardware	3 50
	$ 11,038 12

WILLIAMS SCHOOL.

Teachers	$ 7,367 75
Janitor	720 00
Labor	97 27
Coal	460 45
Wood	20 00
Kindling	11 72
Paving	487 56
Gravel	89 25
Water tax	24 00
Flag	4 90
Desk and chairs	29 00
Total	$ 9,311 90

DUFFIELD NIGHT SCHOOL.

Teachers	$ 1,020 75
Janitor	160 00
Oil	38 70
Total	$ 1,219 45

HANCOCK NIGHT SCHOOL.

Teachers	$ 515 50
Janitor	126 00
Oil	17 40
Hardware	2 31
Total	$ 661 21

HIGH NIGHT SCHOOL.

Teachers	$	1,629 25
Janitor		182 50
Bookkeeping blanks		21 37
Total	$	1,833 12

NORVELL NIGHT SCHOOL.

Teachers	$	1,362 00
Janitor		160 00
Oil		30 06
Cartage		40
Total	$	1,552 46

PITCHER NIGHT SCHOOL.

Teachers	$	1,143 25
Janitor		160 00
Oil		35 20
Hardware		45
Total	$	1,338 90

TROWBRIDGE NIGHT SCHOOL.

Teachers	$	921 00
Janitor		160 00
Oil		19 94
Total	$	1,100 94

WEBSTER NIGHT SCHOOL.

Teachers	$	907 00
Janitor		160 00
Stationery		2 10
Scissors		2 00
Total	$	1,071 10

SPECIAL TEACHERS.

Special teachers	$	8,500 00

BOOK ROOM.

Books	$	28,991 16
Clerk		578 00
Rent		143 86
Delivering books		24 75
Freight		34 36
Extra help		8 25
Sundry expenditures		4 00
Carpet		5 00
Table		8 75
Labor		4 40
Printing registers		324 00
Paper		4 40
School supplies		435 00
Codas		104 40
Total	$	30,670 33

OFFICES.

Janitor	$	349 00
Rent		1,671 67
Electric light		19 84
Ice		18 33
Laundering		9 70
Hanging awnings		3 00
Screens		36 78
Advertising		13 44
Sundry expenditures		3 55
Postage		5 00
Total	$	2,130 81

SECRETARY'S OFFICE.

Clerks	$	1,628 30
Telephone		30 00
Stationery		36 20
Blank books		17 00
Directory		6 00
Desk		22 50
Chairs		8 00
Repairing typewriter		2 00
Extra help		60 00
Electric light		90
Total	$	1,810 90

SUPERINTENDENT'S OFFICE.

Clerks salary	$	710 00
Stationery		10 20
Telephone		30 00
Directory		5 00
Repairing		3 80
Cleaning carpet		3 61
Library steps		4 00
Total	$	765 61

SUPERVISOR'S OFFICE.

Clerk	$	705 00
Rent		75 00
Stationery		86 89
Telephone		24 60
Electric light		11 87
Hardware		9 40
Oil		16 95
Lumber		10 72
Shades		7 50
Labor		6 58
Sundry expenditures		2 79
Furniture		12 00
Total	$	969 30

STORE ROOM.

Ax handles	$ 1 80
Barrel	1 50
Brushes	541 09
Brooms	67 50
Carpet remnants	29 53
Chairs	141 55
Chimneys	32 10
Clocks	161 30
Cotton	45 58
Copperas	26 26
Crayon	17 10
Couplings	20 69
Freight	1 22
Gaskets	11 40
Glass	1 19
Halyards	53 75
Hardware	509 40
Hoes	11 45
Inkwells	36 00
Key tags	8 94
Labor	937 47
Lumber	17 87
Mats	52 50
Sundry expenditures	5 31
Nigrosine	47 25
Oil	64 78
Paint	6 78
Pointers	23 00
Picture cord	10 20
Rakes	10 00
Ruber Matting	27 22
Shades	4 80
Sponges	34 00
Stationery	50 55
Sulphur	39 81
Supplies	406 60
Thermometers	28 00
Toilet paper	4 75

Waste baskets		4 75
Wick		9 90
Total	$	3,511 89

SHOP.

Sundry expenditures	$	3 84
Blacksmithing		23 30
Castings		4 00
Charcoal		4 95
Cartage		22 40
Fittings		22 67
Foot scrapers		18 00
Glass		133 93
Grindstone		3 00
Hardware		200 26
Inkwell glasses		15 00
Inkwell lids		12 00
Labor		1,472 24
Lumber		903 97
Oil		1 15
Paint		627 14
Plastico		687 60
Picture cord		7 95
Roller		45 00
Rubber mattings		131 64
Rubber tube		2 56
Stove repairs		4 43
Supplies		6 19
Teachers' desks		34 00
Telephone		30 00
Water tax		5 00
Total	$	4,422 22

MISCELLANEOUS.

Advertising	$	384 83
Annual report		239 40
Anatomatical charts		1,875 00
Attorney		5 20
Binding books		10 00
Chairs		84 00
Check books		63 00
Fire extinguishers		195 25
Compiling census		40 00
Drawing paper		265 20
Examination paper		18 20
Cartage		110 50
Freight		14 11
Labor		1,483 66
Livery		209 00
Lumber for Seventeenth street lot		26 88
Maps		149 00
Meals at coal test		8 00
Sundry expenditures		95
Notary's commission		1 50
Plumber's license		5 00
Postage		86 56
Printing		1,911 10
Rubber matting		38 29
Rubber stamps		27 00
Rulers		12 00
School District No. 4, Springwells		196 65
Sawing wood		117 50
Slate knives		9 10
Stationery		108 05
Supplies for Kindergarden		13 30
Trip to Boston, Superintendent		125 00
Trips to Lansing, special committee		58 96
Weighing coal		2 56
Total	$	8,605 64

RECAPITULATION OF EXPENDITURES.

Bagley	$ 5,608	89
Barstow	12,686	92
Bellevue, No. 1	2,608	98
Bellevue, No. 2	575	71
Bellefontaine	8,606	82
Berry	30,621	30
Bishop	19,901	37
Brownson	4,634	41
Campbell	5,001	41
Cass	20,529	19
Chaney	4,720	04
Clay	6,865	65
Clinton	6,506	71
Columbian	20,418	67
Cottage Grove	1,090	07
Craft	12,023	37
Custer	1,255	98
Dickinson	4,836	18
Duffield	19,814	96
Everett	10,650	84
Farrand	5,637	40
Ferry	6,668	31
Firnane	4,931	62
Franklin	5,683	56
Garfield	3,371	56
Gratiot	1,657	98
Hancock	16,233	16
Hibbard	2,444	06

Hickey	3,533 01
High	44,519 50
High (Central)	1,101 00
High (Beecher fittings)	8,197 61
Houghton	10,844 25
Hubbard	5,286 64
Irving	12,288 56
Jackson	7,318 25
Jefferson	21,124 09
Johnston	2,924 29
Lincoln	6,291 99
Livernois	1,486 07
McKinstry	11,067 11
Miami	6,015 71
Newberry	17,079 60
Nichols	5,642,55
Norvell	10,113 95
Oakland	11 89
Owen, John	7,033 38
Palmer	6,039 78
Pitcher	9,608 77
Potter	3,878 80
Pulford avenue site	700 00
Roberts	5,560 68
Rose, M. M	1,216 35
Russell	5,459 25
Tappan	14,016 27
Tilden	10,486 91
Training	6,397 11
Trowbridge	10,595 56
Van Dyke	6,428 82
Van Dyke avenue site	750 00
Washington	16,513 88
Webster	17,364 65
Wilkins	11,038 12
Williams	9,311 90
Duffield Night	1,219 45
Hancock Night	661 21
High Night	1,833 12
Norvell Night	1,552 46

Pitcher Night	1,338 90
Trowbridge Night	1,100 94
Webster Night	1,071 10
Special teachers	8,500 00
Book room	30,670 33
Offices	2,130 31
Secretary's office	1,810 90
Superintendent's office	765 61
Supervisor's office	969 30
Store room	3,511 89
Shops	4,422 22
Miscellaneous	8,605 64

TEMENT OF THE COST OF FREE TEXT BOOKS.

USED DURING THE YEAR.

---

y	$ 234 29
ow	822 57
fontaine	578 63
vue	62 58
	1,132 93
p	1,338 73
nson	254 11
bell	211 29
	1,297 38
ey	192 10
	331 68
on	236 83
ge Grove	23 55
	261 87
r	32 80
nson	251 52
eld	1,164 28
tt	657 38
nd	445 29
	313 03
ne	229 54
klin	327 95
e'd	119 93
ot	32 44
ock	894 06

Hibbard	92 99
Hickey	164 56
Houghton	711 64
Hubbard	232 24
Irving	805 62
Jackson	275 12
Jefferson	1,061 46
Johnston	116 98
Lincoln	290 99
Livernois	35 12
Miami	31 86
McKinstry	363 35
Newberry	738 87
Nichols	218 28
Norvell	572 89
Owen, John	364 98
Palmer	283 65
Pitcher	714 34
Potter	168 78
Roberts	372 67
Rose, M. M	88 28
Russell	232 40
Tappan	864 28
Tilden	1,056 05
Training	208 96
Trowbridge	788 39
Van Dyke	294 09
Washington	732 30
Webster	1,414 94
Wilkins	712 27
Williams	595 94
Night schools	159 27
Miscellaneous	65 21

LIST AND DESCRIPTION OF BUILDINGS AND VALUATION OF REAL ESTATE AND BUILDINGS.

NAME.	When erected.	Material.	Kind of roof.	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Bagley	1884	Brick	Shingle	2	6	351	Thatcher furnace	$ 3,700	$ 15,000	$ 18,700
Barstow	1849 1870	Brick	Shingle	3	12	578	Smead	8,580	30,000	38,580
Bellefontaine	1887	Brick	Shingle	2	10	515	Smead.	4,250	25,000	29,250
Bellevue.	1869	Brick	Shingle	2	3	152	Stoves	3,100	2,500	5,600
Bellevue New	1889	Frame	Shingle	1	1	56	Stoves	2,400	1,500	3,900
Berry	1892	Brick	Metal and slate.	2	12	598	Smead	6,150	32,000	38,150
Bishop	1858 1881	Brick	Shingle	3	21	1180	Smead.	11,300	50,000	38,150
Brownson	1887	Brick.	Metal and slate	2	6	300	Smead.	6,000	18,000	24,000
Campbell	1874	Frame	Shingle	2	6	300	Stoves.	5,300	6,000	11,300
Cass	1861 1883	Brick	Metal and shingle	3	22	1065	Steam.	57,000	45,000	102,000
Chaney	1887	Brick.	Metal and slate.	2	6	300	Smead	3,000	18,000	21,000

LIST AND DESCRIPTION OF BUILDINGS, ETC.—(*Continued.*)

NAME.	When erected.	Material.	Kind of roof.	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Clay	1873 1874	Brick	Metal and slate.	2	8	396	Smead	$ 10,000	$ 25,000	$ 35,000
Clinton	1870 1876	Brick	Shingle	2	8	440	Steam	5,840	18,000	23,840
Cottage Grove	1889	Frame.	Shingle	1	1	35	Stoves	Leased.	300	300
Craft	1886 1891	Brick	Shingle	2	8	396	Smead	3,550	20,000	23,556
Custer	1886	Frame.	Shingle	2	2	125	Stoves	1,000	3,000	4,000
Dickinson	1889	Brick	Metal and slate.	2	8	396	Smead	4,500	25,000	29,500
Duffield	1866 1892	Brick	Shingle	3	17	903	Smead	15,500	45,000	60,000
Everett	1869 1873	Brick	Shingle	3	12	606	Smead	6,000	25,000	31,000
Farrand	1883	Brick	Shingle	2	6	300	Steam	5,700	18,000	23,700

Ferry	1886 1889	Frame. Brick..	Shingle	2	8	396	Smead and stoves	5,000	18,000	23,000
Firnane	1882	Frame.	Shingle	2	6	363	Steam	3,950	12,000	15,950
Franklin	1866	Brick..	Shingle	2	6	338	Thatcher furnaces	6,100	4,000	19,400
Garfield	1872 1886	Frame.	Shingle	2	4	204	Stoves	6,300	4,000	10 300
Gratiot	1868	Brick..	Shingle	1	1	42	Stoves	1,500	1,500	3,000
Hancock	1887 1891	Brick..	Metal and slate.	2	12	588	Smead	7,500	30,000	37,500
Hibbard	1886	Frame.	Shingle	2	3	189	Stoves	2,000	1,000	3,006
Hickey	1873 1888	Frame.	Shingle	2	4	196	Furnaces	3,000	4,000	7,000
Houghton	1852	Brick..	Shingle	3	12	588	Steam	7,500	20,000	27,500
Hubbard	1887	Brick..	Metal aud slate.	2	6	300	Smead	5,000	18,000	23,000
Irving	1882	Brick..	Shingle	2	12	661	Steam	18,750	35,000	53,750
Jackson	1891	Brick..	Metal and slate.	2	8	396	Smead	15,000	18,000	33,000
Jefferson	1871 1892	Brick..	Shingle	3	17	857	Smead	9,000	45,000	54,200
Johnson	1884	Brick..	Shingle	2	4	222	Thatcher furnaces	3,000	10,000	13,000
Lincoln	1885	Brick..	Shingle	2	8	448	Steam	7,250	24,000	31,150
Livernois	1876	Frame.	Shingle	2	2	117	Stoves	1,650	2,000	3,650

LIST AND DESCRIPTION OF BUILDINGS, ETC.—(*Continued.*)

NAME.	When erected.	Material	Kind of roof	No. of stories.	No. of rooms.	Seating capacity.	How heated	Value of lot.	Cost of building.	Total.
McKinstry	1886 } 1889 }	Frame	Shingle	2	8	396	Smead	$ 3,000	$ 12,000	$ 15,000
Merrick Avenue	1893	Brick	Metal and slate	2	12	588	Smead	3,200	28,000	31,200
Miami	1887 } 1889 }	Brick	Metal and slate	2	10	492	Smead	29,330	25,000	54,330
Newberry	1886 } 1889 }	Brick	Metal and slate	2	12	588	Smead	4,000	30,000	34,000
Nichols	1868 } 1883 }	Frame	Shingle	2	6	305	Smead	6,350	10,000	16,350
Novell	1889	Brick	Shingle	2	12	646	Steam	5,760	30,000	35,760
Oakland	...	Frame	Shingle	1	1	54	Stoves	800	200	1,000
Owen, John	1880	Brick	Shingle	2	8	411	Steam	6,300	18,000	24,300
Palmer	1890	Brick	Metal and slate	2	8	396	Smead	6,000	18,000	24,000
Pitcher	1871	Brick	Shingle	3	12	860	Steam	4,000	30,000	34,000

Potter	1889	Brick	Metal and slate	2	6	300	Smead	3,000	18,000	21,000
Roberts	1890	Brick	Metal and slate	2	8	396	Smead	5,000	25,000	30,000
Rose	1886	Brick	Shingle	1	1	48	Stoves	3,000	1,500	4,500
Russell	1887	Brick	Metal and slate	2	8	396	Smead	Leased.	25,000	25,000
Tappan	1868 1886	Brick	Shingle	3	16	831	Steam	7,600	30,000	37,600
Tilden	1887	Brick	Metal and slate	2	12	588	Smead	7,450	30,000	37,450
Trowbridge	1889	Brick	Metal and slate	2	12	588	Smead	11,400	30,000	41,400
Van Dyke	1887	Brick	Metal and slate	2	8	396	Smead	7,500	25,000	32,500
Washington	1871	Brick	Shingle	3	12	576	Smead	8,780	25,000	33,780
Webster	1875 1885	Brick	Shingle	2	19	1060	Steam	6,000	45,000	51,000
Wilkins	1870 1873	Brick	Shingle	3	12	602	Smead	7,200	25,000	32,200
Williams	1890	Brick	Metal and slate	2	12	588	Smead	4,900	34,900	39,800
Workshop	.....	Frame.	Shingle	2	.....	.....	.....	1,360	1,500	2,860
Central High	.....	.....	.....	.....	.....	.....	.....	55,000	.....	55,000
Ellery Street	.....	.....	.....	.....	.....	.....	.....	5,940	.....	5,940
Van Dyke Avenue	.....	.....	.....	.....	.....	.....	.....	5,200	.....	5,200
Jackson "Old"	.....	.....	.....	.....	.....	.....	.....	5,000	.....	5,000
Gratiot "Old"	.....	.....	.....	.....	.....	.....	.....	10,000	.....	10,000

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Bagley	N E Fourteenth ave and Pine	Lots 70, 71, Godfroy farm. p.c.726
Barstow	S Congress, near Riopelle	Lot 70, 31.84 ft, 71 Riopelle farm, p. c. 13
"	N Larned, near Riopelle	Lots 68, 69, Riopelle farm, p. c. 13.
Bellefontaine	W Morrell, near Fort	Lots 8,9,10,11,12, sub. lot 10.p.c.30.
Bellevue	W Bellevue, near Champlain	Lots 34, 35, 36 Desnoyer's subdiv. Beaufait farm, p. c. 19
Bellevue, "new"	W Belleyue, near Waterloo	Lots 36, 37, 38 Dupont's sub. Meldrum farm
Berry	N W Concord and Charlevoix	Lots 45.46. 47, 48, 49, 50, 51, 52, and 17 ft. of 44, McLeod sub. p. c. 19.
Bishop	N Winder, near Rivard	Part lot 183 Rivard farm
"	" " "	W. 4 ft. lots 66, 81 Rivard farm
Brownson	S Maple, near Chene	Lots 33, 34, 35, 36, 37 of A. Crane's sec. of Chene farm
Campbell	N E St. Aubin and Alexandrine	One acre of north end lot 40 St. Aubin farm
Cass	N W Grand River and Second aves.	Block 76 Cass farm
Chaney	E Sullivan, near Linden	Lots 43, 44, 45, 46, 47 McBride & Clark's sub. lot 6, p. c. 729
Clay	S Pitcher, near Cass	Lots 10 and 11, blk. 87, Cass farm
Clinton	S Clinton, near Rivard	Lots w. ½ 95, 96, 97, e. ½ 98 Mullett farm
Craft	N E Ash and Vinewood	Lots 20, 22, 24 Campau's sub. w. ½ p. c. 78.
Custer	W Hammond, near Ranspach	Lots 81, 82, 83 Ranspach's sub. p. c. 574
Dickinson	N W Twelfth and Brigham	Lots 22, 23, 24,25,26 Wesson's sub. Thompson farm, p. c. 227
Duffield	S Clinton, near Chene	Lots 4, 5, 6 s. Clinton; lots 4, 5, 6 n Macomb; Chene farm
Everett	S Fort, near Rivard	Lot 41, Rivard farm
"	" " "	Lot 42, Rivard farm
Farrand	S W Harper and John R	Lots 15,16,17 Harper hospital sub. of lot 3 and s. 110 ft. of lot 2, park lot 45
Ferry	N E Ferry and Campau	Part block 63, Jos. Campau farm, p. c. 609
Firnane	S. Fort, near McDougall	Lots 16, 17, 18 Wendell's sub. blk. 6, McDougall fm., p. c. 9 and 454
Franklin	S W Pine and Seventh	Commencing 100 ft. n of s. e. cor. lot 9, Baker fm., running n. 198 ft
Garfield	N E Rivard and Frederick	Lots 36, 37, 38,39,40,41 Gunn's sub. lot 8, Mullett farm
Gratiot	S W Gratiot and Beaufait	One acre of lot 29, Meldrum farm
Gratiot, "new"	N W Gratiot and Butler	N. w. cor, of back concession p.c. 337 and 257
Hancock	N E Hancock and Fourteenth	Lots 459, 460, 461, 462, 463 Godfroy farm, p. c. 726
Hibbard	W Hibbard, near Jefferson	Lot 13 Wesson's sub. lots 2 and 3 Crane's sub. p. c. 644
Hickey	N E McGraw and Eighteenth	Lots 1, 2, 3, 4, 5 Peppers & Heidt's sub. lot 1, estate J. Messmore
Houghton	S W Abbott and Sixth	Lots 1 and 2, blk. 42, Labrosse fm
"	" " "	e. ½ lot 3, blk. 42, Labrosse farm.
High, "Central"	W Brush, S Willis, N Alexandrine	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 blk. 17, Brush sub. Brush farm

DIMENSIONS.	COST OF SITE	DATE OF PURCHASE	DEED RECORDED.	VALUATION 1893.
82 ft. on 14th x 145 on Pine	$ 2,100	Feb. 24, 1883	L 264, p 587	$ 3 700
81.84 ft. on Congress x 130 deep. . .	5,000	April 1, 1886	L. 129, p 266	8,880
" " " " .	600	May 14, 1849	L 25, p 538	
250 ft. on Morrell x 149.5 deep .. .	Annexed.	Sept. 8, 1888	L 401, p 157	4,250
120 ft. on Bellevue x 163.27 deep	Annexed.	Nov. 19, 1886	L 294, p 76	3,100
120 ft. on Bellevue x 153.44 deep.....	1,500	June 15, 1887	L 313, p 315	2,400
220.69 ft. on Concord x 163.27 deep...	6,150	Dec. 4, 1891	L 336, p 464	5,150
150 ft. on Winder x 210 deep.	5,000	Mar. 12, 1856	L 62, p 664	11,800
4 " " " "	300	Sept. 6, 1870	L 147, p 600	
		July 12, 1870	L 147, p 310	
150 ft. on Maple x 105.28 deep . ..	5,500	Sept. 29, 1887	L 310, p 549	8,000
106.73 ft on St. Aubin x 278.10 on Alexandrine..	2,000	Dec. 20, 1872	L 178, p 292	5,800
282.25 ft. on Grand River x 300 ft. on Second ave. x 250.33 ft. on High st	Donated by Lewis Cass	July 2, 1880	L 81, p 375	57,000
150 ft. on Sullivan x 215.50 deep .	2,300	June 30, 1887	L 310, p 303 / L 318, p 347 / L 310, p 318	3,000
100 ft. on Pitcher x 190 deep... .	1,260	June 26, 1873	L 158, p 682	10,000
150 ft. on Clinton x 105.26 deep .	9 000	July 31, 1869 / Nov 5, 1875 / June 2, 1876 / Nov 8, 1875	L 140, p 218 / L 192, p 633 / L 202, p 327 / L 192, p 632	5,640
148.27 ft. on Vinewood x 156 on Ash...	3,500	June 21, 1886	L 303, p 405	3,550
90 ft. on Hammond x 150 deep	1,000	July 27, 1886	L 303, p 450	1,000
158 ft. on Twelfth x 100 on Brigham.	3,750	July 21, 1865 / July 2, 1869 / Nov. 22, 1889	L 116, p 610 / L 349, p 336 / L 349, p 415	4,500
150 ft. on Clinton x 210 deep	2,775	Aug 5, 1889	L 145, p 78 / L 121, p 630 / L 143, p 599	15,800
50 ft. on Fort x 138.33 deep . .	4,000	Sept. 1, 1869 / Sept 13, 1872	L 141, p 271 / L 178, p 294	6,000
" " " " .	170	Sept. 30, 1843	L 15, p 145	
96.84 ft. on Harper x 160.40 on John R	3,000	May 1, 1883	L 258, p 243	5,700
282.40 on Ferry x 150 on Campau x 150 on Mitchell..	2,750	Aug 5, 1886	L 295, p 98	5,000
70 ft. on Fort x 138.33 deep.	1,725	April 29, 187 / April 6, 1871	L 178, p 295 / L 53, p 179	3,360
198 ft on Seventh x 120 on Pine	2,400	Aug 25, 1864 / Feb. 6, 1896	L 111, p 31 / L 121, p 49	6,400
145.09 ft. on Rivard x 180 on Frederick	3,250	July 27, 1886	L 303, p 414	6,800
201.56 ft. on Gratiot x 262.62 on Beaufait.	Annexed.	Aug. 3, 1886	L 303, p 439	10,000
207.50 ft. on Gratiot x 165 deep	Annexed.	Feb 17, 1869	L 127, p 227	1,500
200 ft. on Fourteenth x 145 on Hancock	2,175	Oct 25, 1893	L 282, p 598	7,800
100 ft on Hubbard x 130 deep ..	Annexed.	Oct. 2, 1886	L 327 p 56	2,000
158.7 ft. on McGraw x 123.84 on Eighteenth	1,800	Aug 11, 1888	L 33 , p 202 / L 335, p 215 / L 335, p 217	3,000
100 ft. on Abbott x 130 on Sixth .	750	Dec, 22, 1849	L 37, p 307	7,500
25 ft. on Abbott x 130 deep	700	Mar. 1, 1852	L. 76, p 507	
202.86 ft. on Brush x 280 55 on Willis x 278.85 on Alexandrine .	55,000	Jan. 10, 1893	Contract.	55,000

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Hubbard	W Twenty-fifth, near Baker	W. ½ of s. ½ lot 45 Porter farm. except n. 30 ft.
Irving	N Willis, near Woodward	Lots 25, 26, 27 Willis sub. Park lots 61 and 62
Jackson	N Fort, near Chene	Lots 3, 4 and 5 Chene farm
Jackson, "old"	N Larned, near Chene	Lots 1 and 2, sec. 4. Dubois farm.
Jefferson	N E Crawford and Selden	Part lot 5 Forsyth farm
Johnston	S Waterloo, near Dubois	Lots 13, 14, 15, blk. 29, Dubois farm, s. w. ¼ of p. c. 91
Lincoln	N W Brady and Antoine	Lots 5, 6, 7, 8, 9,10,11, blk. 10, Van Dyke sub. A. Beaubien farm
Livernois	E Livernois, near Michigan	Part p. c. 574, ½ acre
Miami	E Miami, near Wilcox	Lot 9, sec. 9, Governor and Judges plan
"	" " "	Part lot 8, sec. 9, Governor and Judges plan
McKinstry	S W McKinstry and McMillan	Lots 14,15,16,17, 18 sub. lot 33 p. c. 30
Merrick	S E Merrick and Twenty-seventh	Lots 1,2,3,4,5,6 Hubbard & Dingwall's sub. lots 219 to 356, Johnston's sub. Campau fm.. p. c. 78.
Newberry	W Twenty-ninth, near Visgar	Lots 44, 45, 46, 47, 48 Hammond's sub. lot 51, p. c. 30
"	" " "	Lots 48 and 49 Hammond's sub. lot 51, p. c. 30
Nichols	N and S Elm, near Seventh	Lots 20,21, 22, 23, 32,33,34 sub. lots 13, 14. 15, 16 Baker farm
Norvell	N Arndt, near McDougall	Lots 1, 2, 3, 4 sub. blk. 42 McDougall farm, p. c. 9 and 434
"	S Berlin, " "	Alley and lots 12,13,14,15 as above
Oakland	N E Oakland and Holbrook	Part of sec. 43, 10000 acre tract
Owen, John	N W Myrtle and Thirteenth	Lots 4, 5,6, 7,8, 9,10 sub. lot 3 Lafferty farm
Palmer	N Horton, near Antoine	Lots 128, 129, 130,131,132 H. Baker sub. lot 2, sub. ¼ of sec. 57
Pitcher	W Sullivan, near Butternut	Lot 21 part 22, Johnson's sub. p.c. 727 and 729
Potter	W Tillman, near Myrtle	Lots 295, 296, 297 Johnson's sub. Porter farm, p. c. 20 and 21
Roberts	N Adelaide, near Beaubien	Lots 4 and 5 sub. ⅔ lot 177 blk. 7, lot 179 L. Beaubien farm
"	" " "	Lot 6 sub. ⅔ lot 177 blk. 7, lot 179 L. Beaubien farm
"	" " "	Part lot 8 blk. 7, VanDyke's sub. A. Beaubien farm
Rose, M. M.	W VanDyke, near Gratiot	Part of n. ½ of S. Ely, 2 acres p. c. 390
Tappan	N W Thirteenth and Marantette	Lots 46, 49, 52, 55, lot 1 Lafferty farm
"	" "	Lot 58 lot 1 Lafferty farm
Tilden	N W Seventh and Kirby	Lots s. ½ 13,14,15,16,17 sub. lots 34 to 39 Baker farm
"	" "	Lot n. ½ 13, sub. lots 34 to 39, Baker farm
Trowbridge	N Forest, near Hastings	Lots 5, 6, 7, 8 Moran's sub. C. Moran farm
VanDyke	N W Field and Agnes	Lots 104, 105, 106 Field's sub. p.c. 678
Washington	W Beaubien, near Bacon	Lot 8 Cicotte's sub. lot 172, L. Beaubien farm
"	" " "	Lot 7 " " 2 5 interest in
"	" " "	" " " 1-5 interest in
"	" " "	" " " interest in
"	" " "	" " " "
"	" " "	" " " quit-claim deed
"	" " "	" " " "

DIMENSIONS.	COST OF SITE	DATE OF PURCHASE	DEED RECORDED	VALUATION 1898.
180 ft. on Twenty-fifth x 102.25 deep...	$ 3,864	May 9, 1887	L. 309, p 245	$ 5,000
150 ft. on Willis x 151.10 deep	2,100	July 10, 1868	L. 129 p 385	18,750
150 ft. on Fort x 138 deep	13,000	Oct. 26, 1890	L. 369, p 279	15,000
100 ft. on Larned x 120.28 deep	4,000	Jan. 22, 1875	L. 197, p 243	5,000
268 ft. on Crawford x 178 on Selden	2,200	Oct. 13, 1868	L. 141, p 215	9,800
84 ft. on Waterloo x 103.25 deep.... ..	2,310	Jan. 11, 1884	L. 271, p 32	3,000
80 ft. on Antoine x 100 deep (5, 6, 7).	2,800	Sept. 19, 1872	L. 180, p 112	7,450
120 ft on Brady x 95 deep (8, 9, 10,11)				
136.62 ft. on Livernois x 145 deep	1,672	July 29, 1886	L. 303, p 410	1,650
65.65 ft. on Miami x 100 deep... ..	300	July 23, 1844	L. 15, p 508	29,350
20.65 ft. on Miami x 100 deep..... ...	6,500	May 2, 1887	L. 309, p 218	
150 ft. on McKinstry x 140 on McMillan.....	1,650	Nov 5, 1886	L. 295, p 585	3,000
180.27 ft. on Twenty-seventh x 142.79 on Merrick...	3,200	Dec. 3, 1891	L. 384, p 488	8,800
150 ft. on Twenty-ninth x 147.03 deep.	1,100	Nov. 4, 1886	L. 304, p 388	4,000
60 ft. on Twenty-ninth x 147.03 deep..	700	Nov. 15, 1889	L. 419, p 165	
132.88 ft. n Elm x 127.46 on alley x 52.46 w. end, 167 ft. s. Elm x 100.90 w. end x 53.88 e. end... .. .	3,570	Feb. 15, 1892	L. 249, p 43	7,710
120 ft. on Arndt x 125.25 deep...	1,600	July 19, 1876	L. 194, p 446	5,760
120 ft. on Berlin x 115.38 deep	1,500	Dec. 29, 1877	L. 205, p 584	
99 ft. on Oakland x 69½ deep.. . .	Annexed	May 30, 1885	L. 117, p 292	1,000
110 ft. on Myrtle x 114 on Thirteenth.	2,800	Jan. 2, 1873	L. 178, p 291	6,300
150 ft. on Horton x 125 deep .	8,450	Oct. 3, 1890	L. 368, p 91	6,060
		Oct 3, 1890	L. 368, p 91	
110 ft. on Sullivan x 194 deep.... ...	1,700	July 12, 1870	L. 148, p 103	4,000
180 ft. on Tillman x 147 deep. .	2,550	June 28, 1889	L. 344, p 460	3,000
60 ft. on Adelaide x 91.74 deep ..	3,000	Jan. 22, 1898	L. 316, p 270	5,000
40 ft. on Adelaide x 91.74 deep. ...	3,100	Jan. 22, 1890	L. 355, p 50	
26⅔ ft. on Adelaide x 93 deep	1,900	Jan. 30, 1890	L. 419, p 163	
122 ft. on VanDyke x 100 deep	Annexed	Aug 19, 1886	L. 295, p 40	3,660
200 ft. on Thirteenth x 130 on Maran tette.....	1,300	June 10, 1867	L. 147, p 475	7,600
50 ft. on Thirteenth x 130 deep	480	Aug. 23, 1867		
135 ft. on Seventh x 145.82 on Kirby .	2,300	July 13, 1896	L. 303, p 411	7,450
45 ft. on Seventh x 145.82 deep .	1,080	June 9, 1897	L. 313, p 308	
190.48 ft. on Forest x 169.95 deep	7,048.50	Jan. 14, 1889	L. 336, p 415	11,400
150 ft. on Field x 180 on Agnes..	4,000	Aug. 25, 1887	L. 382, p 330	7,500
50 ft. on Beaubien x 218 deep.....	4,850	May 25, 1870	L. 146, p 45	
	1,320	June 3, 1870	L. 146, p 70	
	660	June 4, 1870	L. 144, p 370	
50 feet on Beaubien x 218 deep .	1,980	June 3, 1870	L. 143, p 172	8,780
	87.5	June 10, 1870	L. 146, p 74	
	130	Mar. 7, 1870	L. 142, p 313	
	5	May 28, 1874	L. 142, p 317	

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Webster.... ...	E Twenty-first, near Howard.....	Lots 78, 79, 82, 83, 86 Preston's sub. Godfroy farm, p. c. 729.....
"	" " "	Lots 74 and 75 " " "
"	" " "	Lot 71 " " "
Wilkins	S Porter, near Second.....	Lot 4, block 45, Cass farm.....
"	" " "	Lot 5, " " ... .
Williams.....	N Canfield, near Mt. Elliott.....	Part of lot 21, Leib farm.....
Ellery St. Site..	N E Pulford and Ellery.....	Lots 1,2,3,4, 5, 6,7, blk. 4 Zender's sub. lots 16, 17 and 18, Leib fm..
VanDyke Ave..	W VanDyke, near Maple.....	Lots 13, 14, 15, 16, 30 ft. of 17, Courtney & Venable's sub. lots 60 and 63, VanDyke farm; also lot 1 of John J. Shipherd's sub. of lots 64 to 76, VanDyke farm, p. c. 100 and 679.....

DIMENSIONS.	COST OF SITE	DATE OF PURCHASE	DEED RECORDED.	VALUATION 1893.
150 ft. on Twenty-first x 130 deep.....	$ 2,250	Dec. 18, 1872	L 178, p 293	$ 6,000
60 ft. on Twenty-first x 130 deep.....	975	June 15, 1874	L 178, p 416	
30 ft. on Twenty-first x 130 deep.....	1,600	April 24, 1885	L 276, p 395	
50 ft. on Porter x 130 deep.....	2,750	Aug. 16, 1869	L 147, p 197	7,200
50 ft. on Porter x 130 deep.....	3,000	Aug. 16, 1869	L 141, p 216	
186.97 ft. on Canfield x 181 9 deep.....	4,900	Oct. 11, 1890	L 366, p 83	4,900
220 ft. on Pulford x 51.82 deep; also land in rear, making 108 ft. deep....	5,940	April 3, 1893	Contract.	5,940
218 7-10 ft. on VanDyke x 165 deep....	5,200	Jan. 14, 1893	Contract.	5,200

Respectfully submitted,

DAVID WALLACE,

Secretary.

FIFTY-FIRST ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1894.

DETROIT.
DETROIT PUBLISHING COMPANY, PRINTERS.
1894.

FIFTY-FIRST ANNUAL REPORT

OF THE

BOARD OF EDUCATION

OF THE

CITY OF DETROIT,

FOR THE

YEAR ENDING JUNE 30, 1894.

DETROIT.
DETROIT PUBLISHING COMPANY, PRINTERS.
1894.

THE NEW YORK
PUBLIC LIBRARY
42429
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

BOARD OF EDUCATION

OF THE

City of Detroit.

Office: Hodges' Building, Cor. State and Griswold Sts.

NAME.	Address.	Term expires.
COFFIN, PHILIP M	Whitney Block	June 30th, 1895
FOX, MRS. EMMA A	21 Bagley Avenue	" "
LICHTENBERG, JULIUS	730 Antoine Street	" "
PARSONS, MRS. S. C. O	569 Fourth Avenue	" "
RATHMANN, WM. G	314 Crane Avenue	" "
WALSH, JOSEPH A	323 Sixth street	" "
TODENBIER, JOHN B	Peoples' Savings Bank	" "
TRIX, JOHN	227 Trumbull Avenue	" "
CLARK, JOHN E	18 John R. Street	June 30, 1897
PITKIN, CALEB S	836 Fourteenth Avenue	" "
FINEHART, JOS. K	620 Clinton Ave	" "
DAVIS, MILO H	238 Wreford Avenue	" "
BREWSTER, JAS. H	46 Campau Block	" "
LIPHARDT, WM. C	1140 Michigan Avenue	" "
SEELY, JAS. W	95 Woodward Avenue	" "
ELLIS, LUCIEN E	108 Welch Avenue	" "

OFFICE HOURS.

Secretary. ..... 9 A. M. to 5 P. M.
Superintendent. ..... 4 to 5 P. M.
Supervisor ..... 11 A. M. to 12 M.

OFFICERS FOR 1893-4.

JAMES W. SEELY ..... PRESIDENT
CALEB S. PITKIN ..... PRESIDENT PRO TEM
DAVID WALLACE ..... SECRETARY
F. B. HARPER ..... TREASURER
WM. E. ROBINSON ..... SUPERINTENDENT
GEORGE W. CHURCH ..... SUPERVISOR OF PROPERTY
WM. E. BAUBIE ..... ATTORNEY

STANDING COMMITTEES FOR 1893-94.

JUDICIARY—Inspectors Liphardt, Brewster and Coffin.

TEACHERS AND SCHOOLS—Inspectors Ellis, Davis, Lichtenberg, Clark and Parsons.

TEXT BOOKS AND COURSE OF STUDY—Inspectors Todenbier, Brewster, Ellis Pitkin and Fox.

FINANCE—Inspectors Todenbier, Parsons and Finehart.

REAL ESTATE AND SCHOOL BUILDINGS—Inspectors Davis, Pitkin, Lichtenberg, Fox and Trix.

JANITORS AND SUPPLIES—Inspectors Pitkin, Finehart, Liphardt, Rathmann and Davis.

HEALTH AND VENTILATION—Inspectors Clark, Ellis and Trix.

RULES—Inspectors Rathmann, Finehart and Walsh.

INDEX.

INDEX.

	PAGE.
Board of Education	5
President's Report	9-14
Superintendent's Report	17-185
Statistical Tables	39-54
Report of Supervisor Primary Grades	57-60
Report of Supervisor of Drawing	63-64
Report of Supervisor of Music	67-68
Report of Supervisor of Penmanship	71-74
Report of Supervisor of Physical Culture	77-82
Report of Truant School	85-87
Report of Normal Training School	91-95
Report of High School	99-122
Course of Study	123-185
Secretary's Report	189-261

PRESIDENT'S REPORT.

PRESIDENT'S REPORT.

To the Board of Education:

In compliance with the rules of the Board of Education, I have the honor to submit for your consideration, and through you to the people of the City of Detroit, whom we represent, a brief review of such matters as have claimed our attention during the year just closed, together with a few suggestions that seem pertinent.

SCHOOL ACCOMODATION.

The present congested condition of our schools is very deplorable, and the accomodation of the large annual increase of pupils who will present themselves for admittance next year will be a matter for serious consideration. This lack of school accomodation is due to the fact that the funds for the purchase of sites and erection of necessary buildings have not been available. The appropriations for new buildings, in the form of bonds, were authorized as far back as April, 1892. These bonds were not disposed of promptly, and it was

not until April, 1894, that the money from their sale reached our treasury; consequently, no provision could be made by this Board to prevent the present overcrowded condition of the Schools. In view of these facts, the severe criticisms made upon this Board by the public, on account of lack of school accomodations have been unjust and unwarranted. Now that the money is in our hands there should be no unnecessary delay in proceeding at once with the erection of the needed buildings.

By referring to the statistical report of the Superintendent, the number of buildings in use and the seating capacity of each, together with the enrollment, average attendance and number of teachers in charge can be seen, thus making it unnecessary for me to go into details in these matters. By reference also to the report of the Secretary a full and detailed statement of the financial transactions for the past year may be obtained.

HIGH SCHOOLS.

As you are well aware, we have been at a great disadvantage in regard to High School accomodation since the destruction by fire of our High School building, together with the valuable library and apparatus therein. The old Biddle House has been fitted up, at considerable expense to serve temporarily, but is at best poorly lighted, ill-ventilated, and a poor excuse for a High School. I wish, therefore, to impress upon this Board the necessity for immediate action in regard to the erection of our High School buildings, one in the

eastern, one in the western and one in the central district of the city, The question of three High Schools has already been decided upon by this Board, as well as two previous Boards, and estimates for the same were made and granted by the Board of Aldermen, and also by the Board of Estimates. Considering our present school population there should certainly be a greater number in the High Schools; and were these buildings, already decided upon, ready for occupancy, the present enrollment would be increased at least fifty per cent. There are a large number of pupils living in the extreme eastern and western, as well as the northern part of the city who are debarred from High School privileges for the reason that they cannot afford the necessary expense of car fare to reach the present quarters. The wants of such pupils should receive speedy recognition by locating three schools within easy reach of all. These new buildings should be large and commodious, well ventilated and lighted and thoroughly well equipped with the best modern appliances. The surplus room in the eastern and western High School buildings could be used for primary and grammar school pupils, until such time as they should be needed for High School purposes, thus relieving the adjacent Grammar School buildings. The central district should comprise that portion of the city bounded by Beaubien street on the east and Trumbull avenue on the west. As the southern portion of this district is largely used for commercial purposes and the contiual advancement northwards of the business section pushes the school population in the same direction, it

is conclusive that the school in this central district should be located not farther south than half way from the river to the city limits on the north.

MANUAL TRAINING SCHOOL.

I have discussed, informally, the question of a Manual Traiding School with the different members of the Board, as well as prominent men of our city, and am confirmed in my belief that this matter should receive our careful consideration to the end that we may be able to take intelligent action in the matter upon the completion of our High Schools.

SANITATION.

The steps taken by the Board to improve the sanitary condition of our schools by increasing the volume of air to 2,000 feet for each pupil per hour, and also removing the obnoxious Smead dry closet system, is a step in the right direction. These improvements in our system of ventilation should be continued from year to year until every school building shall be perfectly ventilated and in a good sanitary condition.

EDUCATIONAL.

The generous and hearty co-operation of the members of this Board with the Superintendent in his efforts to direct the educational work of the Schools, leads me to think that they are fully in accord with the progressive and thorough system of instruction now in vogue in the Schools of this city. I am warranted in making this statement regarding the work in our

Schools from the fact that our Course of Study, and other printed matter is in demand from all parts of the country by prominent superintendents and teachers, and is being, in many instances, adopted almost literally in their schools. The attainment of this high standard is a matter of congratulation and is largely due to the untiring efforts of our efficient Superintendent and his faithful assistants and teachers.

One of the most important needs in a perfect system of schools is first-class teachers who possess these three qualifications: Professional training, good scholarship and good health. The rule adopted by this Board a year ago with reference to the examination of teachers is working for the good of the Schools in that it not only has raised the standard and excluded many applicants who were deficient in scholarship but also brought to us a higher grade of teachers than were formerly selected.

NORMAL TRAINING SCHOOL.

The Normal Training School is an important adjunct to our school system, and while the work done is very thorough still the supply of teachers does not equal the demands, consequently it becomes necessary as well as highly beneficial to select each year some foreign teachers. This very necessity prevents too much inbreeding of home methods, and adds the new life necessary to broaden and strengthen the work. The well equipped new building to be erected for this school will make it possible to increase greatly the number of teachers trained each year, as well as to

enhance the efficiency of their work.

EVENING SCHOOLS.

The Evening Schools were well attended during the past year and their work was fully up to the standard. The selection of teachers for this department requires careful thought, as the pupils in attendance, being deprived of the privileges of the day schools, need the best instruction possible to be obtained.

The Board of Education sustained a serious loss in the death of Inspector Dr. James Campbell who died very suddenly Nov. 19th, 1893. By his death the community lost a citizen who was widely known and much honored and this Board a capable member, whose sound judgment and profound knowledge made him especially helpful in matters pertaining to sanitation and contagious diseases in the schools.

In conclusion I desire to thank the members of this Board for the uniform courtesy and consideration extended to me as their presiding officer during the past year.

Respectfully submitted,

JAMES W. SEELEY,

President

SUPERINTENDENT'S REPORT.

SUPERINTENDENT'S REPORT.

To the Board of Education :

In accordance with the rule I respectfully submit the fifty-first report of the schools of this city.

In September of this school year the Columbian, a new twelve-room building at the corner of Merrick and Twenty-seventh streets, was opened. This partially relieved the crowded condition of the schools in the extreme northwestern part of the city. Temporary quarters were rented to relieve the Tilden, Bellefontaine and Norvell, these together with the Columbian furnished 948 additional sittings, and made in all a total of 27,162 sittings at close of school year.

At the present time the schools are in an overcrowded condition and we have been obliged to have half day sessions in a number of the buildings. The significance of this fact is seen when we remember that with about seventy-five per cent. of our children the average school life is only four years. Permit me to call your attention again to the following report submitted at your meeting of April 12th.

To the Board of Education :

The following schools are in an overcrowded condition : Berry, Bellefontaine, Bishop, Brownson, Campbell, Duffield, Hibbard, Johnston, McKinstry, Norvell, Palmer, Tappan, Tilden, Van Dyke, Webster and Williams. In these districts there are 1,465 pupils in school without proper accommodations.

At the opening of the schools last September the enrollment was was 2,052 greater than the previous year. My estimated increase for September, 1894, is 2,500 and these with the 1,465 already mentioned will give an overflow of almost 4,000. I would therefore respectfully urge that there be no delay in the erection of the proposed new buildings.

W. E. ROBINSON.

Superintendent of Public Schools.

As no new buildings can be completed and ready for occupancy during the coming year it will be necessary to rent temporary quarters to relieve the schools mentioned in this above report. This overcrowded condition of the schools not only prevents some children from attending school but necessarily decreases the effciency of the work by putting into the different rooms more than the maximum number of pupils that should be given to any teacher. Overcrowding the schools is very detrimental to their best interests.

The delay in the construction of the new High Schools has been very unfortunate and will necessitate

the furnishing of increased accommodations for this School during the coming year, as the Biddle House is already full to overflowing. I would suggest that such additional room as is needed be secured at once as convenient to the Biddle House as is possible.

COURSE OF STUDY.

The Course of Study as printed in last year's report continues to be as a whole quite satisfactory. Some minor changes are from time to time necessary to keep pace with the progress of the day and with the advancement made by our own classes.

It is a well recognized fact that the conditions are different in the different schools of our city, all cannot do the same amount of work in a given time, and so in the course of study the work to be done in any particular grade is defined in kind rather than in amount. The course of study determines what subjects are to be prescribed in each grade and leaves to the principals and their teachers the freedom of determining just how difficult the work in any particular subject shall be made.

The difficulty and breadth of the work can only be determined by the class in hand. Different classes in the same school differ in different years.

The aim is to have a strong teaching force and then give them the freedom to use their own best judgment in the adaptation of the work. An important part of the duty of each principal is to see that in his school

the work is adapted to the educational needs of his pupils and the requirements of their condition.

Greater flexibility in the course of study requires increased ability in the individual principals and teachers. Superior teachers are hampered by a too rigid course of study, and the spirit of the present course is toward intelligent and well-directed freedom. The controlling idea should be the selection and use of that subject matter which will develop the greatest intellectual strength and moral character in each individual child. Intellectual force and moral power are the ends sought for.

The changes made in the course were mainly in the direction of unifying the work, making close the connection between the work of the different grades and co-ordinating the work in the different subjects. Special attention was given to the selection of the facts to be taught in each subject to determine those of prime importance and to have them presented in their natural relations The general results of these changes have been increased interest on the part of both teachers and pupils in the subject presented, and increased power in imparting and acquiring a knowledge of them.

LANGUAGE AND READING.

No part of the work of schools is more important than that in these two subjects. If a child can read easily and rapidly, if he has formed a habit of reading, and if in addition to this he can speak and write the English language correctly, the schools may be said to have done much for him.

The work accomplished in Language during the year has been very encouraging. There has been a marked growth all along the line in the ability on the part of the children to speak and write good English with a greater degree of ease and rapidity. This increased power to speak and write fluently and correctly has come through the continued practice in composition, both oral and written, in all the grades, and also through much reading of good books. The language which a child reads does much towards forming his own expression. Too much care cannot be exercised in the selection of readers, to give to the child only those books whose style and form of expression are worthy his imitation.

The reading in the schools still continues to improve. Not only do the children read more intelligently and fluently but they are able to do much more reading in a given time. This ability to take the thought from the printed page more easily and rapidly has been the result of continued work with the sentence as a unit and also continued practice in rapid silent or eye reading. That this progress has been made is evident from the fact that the course in reading as outlined two years ago has now become too easy for the grades to which it was assigned and it has become necessary to re-arrange it, by assigning certain books to lower grades, than those in which they were first used. This creates a demand for more reading matter in the upper grammar grades.

This work which has been done during the past two years, as prescribed in the course, in which the pri-

maries have made the acquaintance of some of our best authors through their stories and poems, and the grammar grades have learned to know Hawthorne, Longfellow, Whittier, Holmes, etc., through their reading has made it possible to introduce even more advanced work of this kind into the seventh and eighth grades. This ability on the part of the pupils to take this advanced step is conclusive evidence of the wise action on the part of the Board in so generously supplying the schools with such an abundance of good reading matter. Every addition of a good book to our already generous list from which selections can be made makes it possible to increase the good results along this line.

The critics of the public schools of our country have been calling attention to the fact that the boys and girls who have been trained in these schools cannot speak and write the English language correctly and fluently. The criticism is perhaps a just one. At any rate the fact is true that the tendency at present is to give more attention to the writing and talking of good English, and the extra time devoted to composition in our own schools during the past year is only a movement in harmony with the general educational work of the country. In order to write good English correctly and rapidly a great amount of practice is necessary, and this is furnished the children in the daily reproduction of their history, geography and literature lessons in the form of compositions. Continual writing under judicious criticism develops the power to write easily and correctly. This work in composition grows out of and supplements the work in all branches. It not only

compels the pupils to think more clearly, but it trains them in correct expression and helps them to the knowledge they acquire. This demand for the reproduction of what has been taught makes the teaching more thorough and the pupils more attentive. The ability to read rapidly and to write fluently are among the most practical results our schools can show.

GEOGRAPHY.

The work in this subject is divided into two parts; elementary and foreign geography: the former including the work of the first three grades, and the latter including that of the next four grades: geography proper being merged into the history work in the eighth grade.

The elementary geography is a study of the child's environment through observation. Its purpose is to develop in the child the ideas necessary for a comprehension of foreign geography and thus furnish the material for the study of the latter. It also trains the children to observe and interests them in things about them. During the first two years this work is oral and is taken up as part of the regular language work of the grade. In this elementary geography the forms of land and water as found here in Detroit are observed and described; slopes, water partings and valleys, with their running waters forming streams are easily found in the vicinity of any school, and through their observation children get ideas of slopes and their influence in determining drainage. Belle Isle and the Detroit

River furnish abundant material for developing ideas of island, coast, river, cape, bay, isthmus, etc. Direction, distance and location are taken up in connection with the study of their own city and the daily observation of the weather, together with the special study of the seasons as they come and go, furnish many ideas about climate, rainfall and the change of seasons. Their study of leaves and fruits in the fall, together with that of germination and growth from buds in the spring, also leaves and flowers, interests them in the yearly growth of vegetation and brings to their notice some of the relations of soil, heat, moisture and other conditions influencing this growth. Their study of home animals, domestic and wild, together with that of our commerce, mineral productions, our people, our ways of traveling, our building, our occupations, our manufactured articles, our principal streets and public buildings open the eyes of our children and help them to much information which is valuable in itself, and more valuable to use as an aid to the study of the world which lies beyond them, and which cannot be studied through observation but only through imagination. Children who have made this study of home geography read more intelligently the maps and descriptions found in their geographies ; they see the world outside through what they have seen in their own surroundings.

In our study of foreign geography more attention is given to physical geography than formerly, because it is believed to be the basis for the study of political geography. An effort has been made to drop out all unimportant, burdensome details and concentrate on

great essentials, and then to so present these essentials in their proper relations that pupils will get ideas of cause and effect, and have somewhat of an apprehension of the unity and inter-dependence of the earth and its inhabitants. In the study of a continent the first thing to claim attention is its structure, its highlands and lowlands, its great sloping plains or elevated plateaus, its outline, including great projections or indentations of coast. Then follows a study of its water partings and drainage basins as determined by this structure, and its lakes and river systems as located by these controlling slopes. The geographical and relative location of a continent together with its structure determine the amount of heat and moisture which it will receive and thus furnish the key to climate. Climate and soil determine vegetation and this in turn largely influences animal life. Mining regions are located largely by structure, and these in turn determine the occupation of the people in such regions, and so the whole is one continuous chain, each link having its proper place in the natural order of development and hence of study. The distribution of people, together with the characteristics and comparative civilization of each race follows this study of the physical features of the globe, and then political geography is taken up. The most important political divisions are studied with reference to comparative size, population, government, religion and occupation of the peoole. Then follows a study of the great commercial routes and centers of the world, together with a special study of Michigan, United States and some of the leading countries of the world. The idea is to train the children to observe, to

see relations, to think for themselves, rather than to memorize the thoughts of others, to study geography in an intelligent way and get a method of learning rather than simply an accumulation of memorized facts without the power to learn new ones continually and independently. This course of study is very broad and comprehensive, but at the same time entirely practical. To do this work successfully requires much study and preparation on the part of the teacher. The necessity for intelligent, energetic teachers is clearly seen. We have had a very generous supply of geographies, geographical readers, globes, moulding tables, etc.

The books for teachers' tables and the physical wall maps furnished during the past year have been a great aid to the teachers in this work.

The work in map drawing has improved greatly during the year. This ability on the part of the pupils to draw correctly and rapidly the portion of the country studied about renders their work much more intelligent. This work in map drawing together with the excellent illustrated composition work in connection with the descriptive geography not only develops the child's power of expression but renders his work study of geography more thorough and productive of lasting results.

HISTORY.

The primary object in teaching history to children is to interest them in the subject and make them readers of history. To do this requires time, and for this reason the work in this subject is begun in the first grade and continued through the entire course.

Theoretically it might seem as if this subject were beyond the younger children, but the fact has been proven that they can not only understand it but they are intensely interested in it when properly adapted and prescribed. During the first three years this work is presented in the form of a story. Some prominent character, Benjamin Franklin, for instance, is selected, and the story of his life, more particularly his boyhood, because that is more interesting to and more easily understood by the children. is told by the teacher to the children.

The story is illustrated by means of drawings on the blackboard and pictures. The pupils and teacher talk over each fact as it is presented, and then the pupils reproduce the story orally in their own language, and in the third grades they begin the written reproduction of the same. Several weeks are taken for each story. The children have time to absorb and assimilate the facts given, and instead of losing interest the interest increases from day to day.

These stories furnish material for many reading lessons from the blackboard; also the best kind of materials for language lessons. The child is encouraged to tell the whole story. He is helped to clothe it in good language. He is led to narrate the facts in their logical sequence, and the whole furnishes an excellent opportunity for connected thinking and correct talking. Great care has been used in the selection of the material presented to find that which the children can understand and enjoy. The stories have all been graphical and

have dealt with particular facts in the life of the individual rather than with generalizations. The object is through each story to give the child a picture of life during a certain period of our history ; what the people did, how they lived and dressed, how they traveled, their manners and customs, etc.

In the fourth grade the children begin the reading of history through one of their regular readers. Dodge's Stories of American History, and this work is continued during one term of each year in the work of the three following grades, so that when the children reach the eighth grade they will have had four years' experience in reading history as a part of their regular reading lessons.

In the eighth grade history is taken up as a regular study, the important events being treated in a comprehensive and methodical way. The history in this grade furnishes abundant material for composition writing and the work as outlined and carried out during the past year has been very satisfactory. The results of the introduction of this study of history into all the grades begin to be very perceptible in the upper grades in the increased interest in the subject and broader knowledge of its truths.

ARITHMETIC.

The work in this subject, as a whole, is very satisfactory. The introduction of percentage into the third and fourth grades and its continuation through the fifth and sixth to the seventh where the subject is

treated comprehensively has been a success, the pupils in these grades become familiar with the language of percentage through its use in simple problems and by the time they reach the seventh grade where this subject is completed a broad foundation has been laid for its development and thorough comprehension, and the results secured should be more satisfactory. Not only does the introduction of this work into the lower grades render its teaching in the higher grades more efficient but many children who never reach the higher grades thus have an opportunity to familiarize themselves with the language of percentage, which is so largely used in all business transactions The same might be said of the work in fractions, this early introduction and continued teaching leading gradually into the more difficult problems of the different subjects in arithmetic is more in accordance with the laws of mind growth and hence should produce better results.

Mental arithmetic is an important branch of this subject. Much of the work that children do with their pencils should be done by shortened mental processes. Mental arithmetic is or should play an important part in every arithmetic lesson, rather than to be set aside as a separate subject having a distinct time for its recitation.

FREE TEXT BOOKS.

The system of free text books seems to grow in popularity with both teachers and citizens, and its general effects are to increase the efficiency of the work. The Schools have been generously supplied with books

and other materials and teachers and principals deserve commendation for the excellent care which has been taken of all such school property. Another effect of this system has been to keep many children in school during the past year who were unable to buy such books and material for themselves on account of the general financial depression.

Our experience with paper covered books leads me to suggest that hereafter all books purchased be bound in cloth or other durable materials. Inasmuch as good paper coverings can be purchased at one and a quarter cents apiece I would suggest that such covers be supplied at the beginning of each year for all books used by pupils, thus preserving the books and also modifying the objection that has been raised against different pupils using the same book.

EXAMINATIONS AND PROMOTIONS.

The subject of examinations and promotions is one of great importance because it influences so largely the character of the work done in the schools. The question as to whether or not the uniform written examination given at stated times shall be made the basis for promotion is one which has attracted widespread attention among educators, and the feeling has grown that such examination should not be made the basis for promotion, in fact promotion examinations have been abandoned in many of our cities.

Examinations should be used as a potent means of teaching, and not as an end in the decision of whether

or not a child shall be advanced to the next higher class. Each topic or subject in each of the thought studies, history, geography, science and literature when about to be completed should be finished by the written expression of what the child knows on the subject in the form of a composition, and these written productions, while forming an important part of the language work are also tests of the child's knowledge The daily class work of the pupil, together with all these written compositions, furnish the teachers abundant materials for judging whether or not a child should be promoted. Records should be kept by teachers and given to principals of the work of each individual child. These examinations thus become a part of the regular legitimate work of the school room. a means of stimulating attention, intensifying interest, fixing thought and cultivating the power of expression.

Observations during the past year indicate the fact that there are too many non-promoted pupils in our primary schools. Of course there are exceptions where from sickness, mental inability. or other good reasons, pupils are unable to do the work of the class, but ordinarily if a pupil has been regular in attendance, he should do the work of the class and be advanced with the class. Where many non-promotions occur the mat ter needs attention. Either the teaching is inefficient the course too difficult, the standard of promotion unreasonably high, or for some other reason which needs investigation, the children's best interests are being sacrificed. Pupils often lose interest and ambition and

become stupid from being kept in one grade too long. The average school life of the great mass of our children is far too short at best, and it is a matter of prime importance that their time be spent most profitably, the work done most expeditiously, and each individual child be advanced as rapidly as his capacity will allow him to go forward in his work.

A child's power to do the work of a grade should determine when he should enter that grade. Individual promotions should be made at any time during the term when any particular child shows the power to do more difficult work than that of the class in which he is found, and classes as a whole should be promoted at any time during the term or year when they may be ready to take the step in advance. A class should never be kept "marking time" until the end of a term comes, or the time arrives at which it is customary to make promotions.

SCHOOL MANAGEMENT.

Good conduct and right living is the end of education. Strength and beauty of character are the most desirable results which our schools can produce. All true education centers in the individual and develops that personal force and power which best fits him for successful living and individual usefulness in life The best order in a school room is that which springs from self-control and self-direction on the part of the pupils rather than from external sources, such as fear of punishment or hope of reward

It gives me pleasure to report that the general order in our schools is excellent, the pupils are obedient and respectful, and their uniform good behavior is the outgrowth of the interest in the work. Pupils can be too busy for mischief. Disorder is often nothing more than misdirected energy, and the utilizing of this force in the doing of legitimate work destroys the conditions for disorder. As skill on the part of our teachers increases, the difficulties in school management decrease, a better understanding of child nature, and a more thorough knowledge of the work to be done and its adaptation to the needs of the children enables a teacher to govern pupils through their interest in and love for their work.

The general attitude of our teachers toward the work, their interest in and sympathy with the pupils, and their harmonious and helpful relations to each other and to their principals and superintendents has engendered an atmosphere of mutual helpfulness and unity of purpose which is productive of good order and good work.

EVENING SCHOOLS.

In my report last year, I suggested that each pupil be assessed a certain enrollment fee, which should be held as a prepaid fine for any misdemeanor under the rules, and also as a guaranty to regular attendance, said amount to be refunded if not forfeited. At the beginning of the Night School sessions this suggestion was adopted by the Board and introduced into the schools. Its effect was to shut out from these schools

the large class of pupils who usually enroll out of curiosity rather than because of a desire to attend regularly and secure the benefits of the school. Those who did enroll were more regular in their attendance and exemplary in their conduct, and the work done in these schools was more satisfactory than heretofore.

1893-4.

School.	Enrollment.		
	Boys.	Girls.	Total.
Pitcher	200	32	232
Trowbridge	374	101	475
Norvell	183	151	334
Duffield	159	91	250
Jefferson	73	38	111
Everett	256	97	353
Webster	129	38	167
Wilkins	171	70	241
Newsboys	52		52
	1,597	618	2,215

TEACHERS' INSTITUTE.

The Annual Institute for the teachers of Detroit and Wayne County was held in the Church of Our

Father, April 4, 5 and 6, '94. The following program was carried out in a very prompt and spirited manner:

WEDNESDAY, APRIL 4, A. M.

Devotional Exercises.	Rev. H. P. De Forest
Doctrine of Concentration.	Col. Parker
Music.	Miss Louise E. Hughes
Educational Value of History.	Dr. Hinsdale

Recess.

Science—The Formal Steps in Study.	Prof. Jackman

WEDNESDAY, P. M.

The Organization of Historical Facts,	Dr. Hinsdale
Music.	Miss Carrie Williams
The Study of Organisms.	Prof. Jackman

Recess.

Doctrine of Concentration—Continued.	Col. Parker

THURSDAY, A. M.

Devotional Exercises.	Rev. Stephen W. Frisbie
A Study of Foods.	Prof. Jackman
Music.	Miss Hannah Cundiff
Subject Continued.	Col. Parker

Recess.

Zero or Infinity.	Supt. Pattengill
History, Time, Place and Causation.	Dr. Hinsdale

THURSDAY, P. M.

Doctrine of Concentration—Continued. Col. Parker
Music. Mr. Charles E. Martin
A Study of Inorganic Materials. Prof. Jackman
Recess.
Historical Geography. Dr. Hinsdale

FRIDAY. A. M.

Devotional Exercises Rev. Reed Stuart
Management in the School. Supt. Draper
Music Ladies' Quartet
Doctrine of Concentration—Continued. Col, Parker
Recess.
Plant Life. Prof. Jackman

FRIDAY, P. M.

Animal Life. Prof. Jackman
Music. Mr. E. A. Petrequin
Instruction in the School. Supt. Draper
Recess.
Doctrine of Concentration—Final Lecture. Col. Parker

EVENING PROGRAMME.

WEDNESDAY EVENING

Artist or Artisan. Which? Francis W. Parker

FRIDAY EVENING

Science and the Elementary School.
Supt. Andrew S. Draper

Col. Francis W. Parker is Principal of the Cook County Normal School, Chicago. He is one of the most popular institute workers in the country and so inspired and enthused our teachers that the results of his work among us were very perceptible in the renewed earnestness of purpose with which our teachers returned to their work after having heard him. Col. Parker said of Detroit: "The atmosphere seemed filled with a desire to understand better things and do better work." His subject for the entire session was the "Doctrine of Concentration." His lectures presented some of the most vital principles of education in a most forcible and impressive way.

Dr. B. A. Hinsdale, of Ann Arbor University, presented the subject of "How to Teach History, in a masterly way giving the teachers many valuable helps in the presentation of this subject.

Supt. A. S. Draper, of Cleveland, gave many valuable and practical hints on school management and methods of instruction.

Prof. W. S. Jackman, of Chicago, gave valuable talks on the teaching of elementary science in our public schools. This is a subject which our teachers have been studying during the year, and consequently they were much interested in his work.

The Institute as a whole was a great success. Principal W. C. Martindale, of the Williams School, made a very dignified and highly efficient conductor. The teachers were prompt in their attendance and

strictly attentive to the work, and the whole session was very fruitful of good results to the schools of our city.

In concluding this, my eighth year's work as Superintendent of your schools, allow me to express my appreciation of the loyal support and assistance of the principals and teachers, and of their ready willingness to adopt and carry into effect all suggestions and directions given by me. Also to express to the Board of Education my appreciation of their liberality in supplying the schools with the best of modern books, apparatus and appliances, thus making it possible to bring about the present healthy and prosperous condition of the schools.

W. E. ROBINSON.

Superintendent of Schools.

Detroit, June 30, 1894

❋ Statistical Tables. ❋

Enrollment, Attendance, etc., in Each School.

SCHOOLS.	Total enrollment, including duplicates on account of transfers	Average membership.	Average attendance.	Number of teachers, June 22, '94.
Bagley	478	394	368	7
Barstow	961	506	472	13
Bellefontaine	726	521	496	12
Bellevue	255	127	120	3
Berry	1,324	565	532	15
Bishop	2,335	1,127	1,041	25
Brownson	574	332	310	7
Campbell	585	306	276	7
Cass	2,188	957	909	25
Chaney	521	297	281	7
Clay	563	305	286	9
Clinton	944	413	381	9
Columbian	712	339	313	11
Cottage Grove	68	35	33	1
Craft	756	328	314	9
Custer	86	46	43	2
Dickinson	574	247	231	9
Duffield	1,632	812	774	19
Everett	966	465	436	13
Farrand	504	272	254	7
Ferry	820	333	309	9
Firnane	640	287	269	6
Franklin	543	267	247	7
Garfield	281	144	135	4
Gratiot	40	24	23	1
Hancock	1,074	518	486	14
Hibbard	418	185	164	4
Hickey	254	113	105	4

ENROLLMENT, ATTENDANCE, ETC.—Continued.

SCHOOL.	Total enrollment including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers, June 22, '94
High	1,545	1,188	1,164	38
Houghton	994	442	415	13
Hubbard	574	306	295	7
Irving	1,103	601	570	15
Jackson	690	311	292	9
Jefferson	1,664	784	723	19
Johnston	407	215	205	4
Lincoln	714	340	312	9
Livernois	195	92	84	2
McKinstry	923	400	380	9
Miami	370	112	86	3
Newberry	1,066	502	475	14
Nichols	521	249	230	7
Normal	229	129	121	6
Norvell	1,587	698	6[illegible]	18
Oakland	119	53	49	2
Owen, John	814	456	440	9
Palmer	842	461	441	9
Pitcher	995	572	548	14
Potter	472	246	228	7
Roberts	684	350	331	9
Rose, M. M.	6	42	40	1
Russell	80	96	90	4
Tappan	1,[illegible]74	764	728	18
Tilden	1,176	736	694	15
Tilden Annex	118	90	84	2
Trowbridge	1,040	537	51[illegible]	15
Van Dyke	9[illegible]5	443	417	11

ENROLLMENT, ATTENDANCE, ETC.—Continued.

SCHOOL	Total enrollment, including duplicates on account of transfers.	Average membership.	Average attendance.	Number of teachers, June 22, '94
Washington	984	500	467	14
Webster	2,079	1,070	1,014	23
Wilkins	1,044	472	444	13
Williams	1,120	634	602	15
Winterhalter	213	104	98	3
Specials				7
Totals	48,805	24,225	22,814	633

The sum of the enrollments in all the schools, including transfers from one school to another, or from one room to another in the same school, is as shown above.. 48,805

Deduct on account of duplicate enrollments 17,770

Actual number of different names enrolled in all the schools during the year 31,035

STATEMENT OF PROMOTIONS

(Half Yearly) for the School Year Ending June 22, 1894.

SCHOOLS.	Grammar Grade			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent. of promotions.	Average number belonging	Whole number of promotions.	Per cent. of promotions	Average number belonging.	Whole number of promotions.	Per cent. of promotions.	Average number belonging.
Bagley .				417	73	284	417	73	284
Barstow.	484	83	290	248	57	216	732	72	506
Bellefontaine. .	301	94	160	600	83	361	901	86	521
Bellevue		.	.	175	68	127	175	68	127
Berry	514	95	269	372	63	296	886	78	565
Bishop	559	66	422	925	65	705	1,484	66	1,127
Brownson..				484	72	332	484	72	332
Campbell..				614	51	306	814	51	306
Cass . . .	1,061	80	580	645	80	577	1,606	84	857
Chaney... .. .				145	70	207	415	70	207
Clay	60	81	26	487	89	272	547	88	308
Clinton ..				642	77	413	642	77	413
Columbian	133	103	64	194	71	275	327	77	339
Cottage Grove				57	62	45	57	52	35
Craft	46	82	28	446	74	300	492	75	328
Custer			...	70	86	46	70	86	46
Dickinson.	65	150	21	430	70	226	393	77	247
Duffield. .	1,106	130	440	601	85	353	1,707	105	812
Everett .	286	80	174	433	75	291	719	77	465
Farrand	108	62	87	289	78	185	397	73	272
Ferry. .	90	83	18	481	76	315	511	76	333
Firnane .				428	74	287	428	74	287

PROMOTIONS.—Continued.

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent. of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent. of promotions.	Average number belonging.
Franklin	72	90	40	393	86	227	465	87	267
Garfield				280	97	144	280	97	144
Gratiot				46	95	24	46	95	24
Hancock	424	83	253	351	66	265	775	75	518
Hibbard				282	76	185	282	76	185
Hickey				196	86	113	196	86	113
Houghton	216	89	121	452	70	321	668	75	442
Hubbard				469	76	306	469	76	306
Irving	662	84	394	341	82	207	1,003	83	601
Jackson				399	64	311	399	64	311
Jefferson	580	78	355	657	76	429	1,217	77	784
Johnston				321	74	215	321	74	215
Lincoln				414	61	340	414	61	340
Livernois				102	55	92	102	55	92
McKinstry	51	77	33	501	66	376	552	67	409
Newberry	184	71	129	562	75	373	746	74	502
Nichols				393	80	249	393	80	249
Normal	22	44	25	123	59	104	145	56	129
Norvell	202	80	125	725	63	573	927	66	698
Oakland				91	86	53	91	86	53
Owen, John	95	101	47	468	75	309	563	82	356
Palmer				601	82	364	601	82	364
Pitcher	497	83	296	362	65	276	859	75	572
Potter				347	70	246	347	70	246
Roberts	114	77	74	373	67	276	487	69	350
Rose, M. M.				61	72	42	61	72	42

PROMOTIONS.—CONTINUED.

SCHOOLS.	Grammar Grade.			Primary Grade.			Whole School.		
	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.	Whole number of promotions.	Per cent of promotions.	Average number belonging.
Russell	....	.	.	493	67	366	493	67	366
Tappan	554	91	304	715	77	460	1,269	83	764
Tilden	602	93	323	733	88	413	1,335	90	736
Tilden Annex				145	80	90	145	80	90
Trowbridge	487	86	281	364	73	256	851	79	537
Van Dyke	.		. .	678	78	433	678	78	433
Washington	362	86	211	491	85	289	853	86	500
Webster	857	84	508	870	77	562	1727	80	1,070
Wilkins	323	85	188	494	87	284	817	86	472
Williams	219	95	115	908	87	519	1,127	89	634
Winterhalter			.. ..	120	57	104	120	57	104
Totals	11,198	87	6,430	24,519	74	16,495	35,707	78	22,925

Increase in Enrollment, Average No. Belonging and Average Attendance.

	Enrollment for 1893-4.	Enrollment for 1892-3.	Increase for year.	Average No. belonging 1893-4.	Average No. belonging 1892-3.	Increase during year.	Average attendance, 1893-4.	Average attendance, 1892-3.	Increase for year.
Sept ...	25,761	23,986	1,775	24,123	22,335	1,789	22,682	21,094	1,588
Oct. ...	26,892	25,117	1,775	24,486	22,587	1,899	23,178	21,378	1,800
Nov..	27,403	25,821	1,782	24,453	22,643	1,810	23,113	21,419	1,694
Dec	26,458	25,930	528	24,184	22,593	1,591	22,714	21,725	989
Jan	28,068	26,329	1,739	24,154	22,392	1,762	22,648	21,085	1,563
Feb .	29,196	27,209	1,987	24,181	22,321	1,860	22,744	20,981	1,763
March....	30,017	27,762	2 245	24,223	22,577	1,646	22,761	21,280	1,481
April ..	30,592	28,758	1,834	24,282	22,348	1,934	22,822	20,938	1,884
May ...	30,944	29,047	1,897	24,291	22,239	2,052	22,813	20,938	1,875
June	31,035	29,094	1,941	24,225	22,236	1,989	22,814	20,770	2,044

General School Statistics for the School Year Ending June 22, 1894

1. Population of the City of Detroit, 260,000.
2. Valuation of the property of the city, $199,679,210.
3. Amount of levy for all municipal purposes, $3,015,817 72.
4. Amount of levy for the current expenses of the public schools, $482,000.
5. Amount received for sale of bonds, school sites and buildings, $462,400.
6. Amount appropriated for all school purposes, $632,000.
7. Per cent. of school taxes upon entire municipal levy, 20.95.
8. Amount of money received for primary school fund, $116,674.01.
9. Whole cost of superintendence and instruction, including evening schools, $429,526.68.
10. Whole cost of incidentals, including all current school expenses, except those named in 9 above, $166,001.78.
11. Amount paid for sites and school buildings, $113,320.87.
12. Average weeks of membership of each pupil enrolled, 31.2.
13. Average weeks of attendance of each pupil enrolled, 29.3.
14. Average salary of all teachers, including principals, first assistants, and specials, $666.20.
14. Average salary of all teachers, excluding principals, first assistants and specials, $596 27.
16. Total cost of tuition in evening schools, $9,116 75.
17. Total cost of tuition in ungraded schools, $4,775.
18. Per cent of promotions on average membership, .78.

General School Statistics for the Three Departments for the School Year Ending June 22, 1894.

	Primary Grade.	Grammar Grade.	High School.	Total and Average.
1. Number of different names enrolled	22,475	7,310	1,250	31,035
2. Average membership for the year	16,607	6,430	1,188	24,225
3. Average daily attendance for the year	15,540	6,110	1,164	22,814
4. Per cent. of attendance on membership	93.3	95	97.9	94
5. Number of pupils in membership at close of year	16,110	6,180	1,222	23,512
6. Number of male teachers, including Supt	5	14	11	30
7. Number of female teachers	375	201	28	604
8 Average number of teachers, excluding superintendent and special teachers	374	206	38	618
9. Average number of teachers, including specials				625
10. Average number of pupils to the teacher, excluding specials, based on average membership	44.4	31.2	31.2	38.7
11. Cost per capita for instruction and superintendence, exclusive of ungraded school	$14.38	$21.54	$33.40	$17.23
12. Cost per capita for incidentals, based on average membership	6.85	6.85	6.85	6.85
13. Cost per capita, including all current expenses, except money invested in school buildings	21.23	28.39	40.25	24.08
14. Cost per capita in ungraded department				$42.63
15. Number of days the schools were actually in session				190

Location, Number of Rooms, Seating Capacity, Average Attendance, Etc.

SCHOOLS.	LOCATION.	No. of rooms.	Number of seats.	Average attendance for the year.	Average No. of teachers for the year.	Av'ge No. of pupils to teacher.
Bagley	Fourteenth and Pine..	6	351	268	7	38
Barstow	Larned near Riopelle	12	533	472	13	36
Bellefontaine	Morrell near Fort	10	539	496	12	41
Bellevue	Bellevue near Champlain	3	152	120	3	39
Berry	Concord and Charlevoix.	12	636	532	14⅕	34
Bishop	Winder near Rivard	22	1,164	1,041	25	41
Brownson.	Maple near Chene	6	307	310	7	44
Campbell.	St. Aubin and Alexandrine	6	304	276	7	39
Cass	Grand River and Second.	22	1,067	909	25	36
Chaney	Sullivan near Linden	6	331	281	7	40
Clay.	Pitcher near Cass.	8	402	298	9	31
Clinton	Clinton near Rivard..	8	445	381	9	42
Columbian.	Merrick and Twenty-seventh	12	590	313	10	31
Cottage Grove...	Van Dyke cor. Maple.	1	42	33	1	32
Craft	Vinewood and Ash.	8	408	314	8⅛	39
Custer	Hammond near Rauspach..	2	125	43	2	21
Dickinson	Twelfth and Brigham	8	987	231	8⅛	27
Duffield	Clinton near Chene.	18	887	774	19	40
Everett	Fort near Hastings.	12	602	436	13	33
Farrand	Harper and John R	6	310	254	7	36
Ferry	Ferry and Jos. Campau	8	379	309	9	34
Firnane	Fort near McDougall.	6	355	269	6½	41
Franklin	Seventh near Locust.	6	322	247	7	35
Garfield	Rivard and Frederick	4	205	135	4	33
Gratiot	Gratiot near Leesville..	1	42	23	1	23
Hancock	Hancock and Fourteenth	12	587	480	14	34
Hibbard.	Hibbard north Jefferson.	4	227	164	3½	46
Hickey	Eighteenth and McGraw	4	194	105	3½	30
High	Jefferson near Brush.	4	1,094	1,164	38	30
Houghton	Abbott and Sixth	12	589	415	13	31

LOCATION, ETC.—Continued.

SCHOOLS.	LOCATION.	No. of rooms.	Number of seats.	Average attendance for the year.	Average No. of teachers for the year.	Av'ge No. of pupils to teacher.
Hubbard	Twenty-Fifth and Labrosse	6	334	295	7	42
Irving	Willis near Woodward	12	6 65	570	15	38
Jackson	Fort near Chene	8	392	292	8½	34
Jefferson	Selden and Crawford	18	868	723	19	38
Johnston	Waterloo near Dubois	4	217	205	4	51
Lincoln	Brady and Antoine	8	450	312	9	34
Livernois	Livernois near Michigan	2	104	84	2	42
McKinstry	McKinstry and McMillan	8	433	383	9	42
Miami	Miami near Gratiot	5	114	86	5	17
Newberry	Twenty-Ninth near Visgar	12	553	475	14	33
Nichols	Elm near Seventh	6	298	230	6⅓	35
Normal	Miami near Gratiot	5	152	121	8½	14
Norvell	Arndt near Campau	15	770	675	17	39
Oakland	Holbrook east of Woodward	2	82	49	1½	32
John Owen	Myrtle near Thirteenth	8	405	340	9	37
Palmer	Horton near Beaubien	8	420	341	9	37
Pitcher	Sullivan near Butternut	12	558	538	15	35
Potter	Tillman near Myrtle	6	302	228	7	32
Roberts	Adelaide near Antoine	8	392	331	9	36
Rose, M. M.	Van Dyke north Jefferson	1	48	40	1	40
Russell	Russell near Elliot	8	438	346	9	38
Tappan	Thirteenth and Marantette	16	823	728	18	40
Tilden	Kirby and Seventh	12	704	694	15	46
Tilden Annex	" " "	2	100	84	2	42
Trowbridge	Forest near Antoine	12	606	513	14⅓	35
Van Dyke	Field and Agnes	8	417	417	9	46
Washington	Beaubien near Madison	12	553	467	14	33
Webster	Twenty-First and Howard	19	1,102	1,142	23	44
Wilkins	Porter and Second	12	600	444	13	34
Williams	Canfield and Mt. Elliott	12	608	602	15	40
Winterhalter	River and Junction	3	128	98	2½	39
Totals		519	27,162	22,814	618	37

SCHOOL CENSUS FOR THE LAST FIFTY-THREE YEARS.

YEAR	Census.	YEAR	Census.
1841	2,093	1868	22,810
1842	2,239	1869	27,039
1843	2,578	1870	26.641
1844	3,146	1871	28,779
1845	3,426	1872	30,230
1846	3,882	1873	31,936
1847	5,846	1874	33,772
1848	6,546	1875	34,593
1849	6,306	1876	35,172
1850	6,965	1877	35,739
1851	7,253	1878	35,962
1852	7,883	1879	37684
1853	8,520	1880	39,467
1854	9,983	1881	37,926
1855	9,912	1882	40,201
1856	10,502	1883	43,340
1857	12,688	1884	45,641
1858	13,138	1885	53,049
1859	13,208	1886	56,488
1860	14,159	1887	66,963
1861	14,159	1888	65,132
1862	15,398	1889	63 009
1863	16,473	1890	72,673
1864	17,399	1891	80,500
1865	18,710	1892	79,922
1866	20,350	1893	73,167
1897	21,742		

SCHEDULE OF ANNUAL SALARIES OF TEACHERS.

HIGH SCHOOL.

Principals, grade principals and teachers at the head of special departments as agreed upon.

Other assistants in the High School—

For first year of service	$700 00
For second year of service	750 00
For third year of service	800 00

Regular rates for primary and grammar school teachers—

For first year of service in the Detroit Public Schools	$350 00
For second year of service in the Detroit Public Schools	400 00
For third year of service in the Detroit Public Schools	450 00
For fourth year of service in the Detroit Public Schools	500 00
For fifth year of service in the Detroit Public Schools	550 00
For sixth year of service in the Detroit Public Schools	600 00
For seventh year of service in the Detroit Public Schools	650 00
For eighth year of service in the Detroit Public Schools	700 00
For ninth year of service in the Detroit Public Schools and after	725 00
First assistants in buildings of twelve or more rooms per year,	800 00
Teachers of half day schools having more than seventy-four pupils in attendance, in addition to regular rates, per school month	5 00

PRINCIPALS.

Principals of schools of less than six rooms, $800 per year; of six rooms, $850; of eight rooms, $900: from nine to eleven rooms, $1,100; from twelve to fourteen rooms, $1,300; from fifteen to seventeen rooms, $1,600; of eighteen or more rooms, $2,000.

In case one or more rooms shall be unoccupied in any building of six or more rooms, $2.50 shall be deducted from the monthly salary of the principal for each unoccupied room.

The following table shows the different salaries paid per school month, and the number of teachers to whom certain salaries are paid, according to the pay-roll of June, 1894:

25 teachers at	$ 12 00
4 teachers at	30 00
32 teachers at	35 00
43 teachers at	40 00
40 teachers at	45 00
47 teachers at	50 00
44 teachers at	55 00
45 teachers at	60 00
1 teacher at	62 50
33 teachers at	65 00
3 teachers at	67 50
42 teachers at	70 00
146 teachers at	72 50
1 teacher at	75 00
51 teachers at	80 00
10 teachers at	85 00
17 teachers at	90 00
12 teachers at	100 00
1 teacher at	110 00
4 teachers at	120 00
1 teacher at	122 50
14 teachers at	130 00
3 teachers at	140 00
4 teachers at	160 00
1 teacher at	180 00
7 teachers at	200 00
1 teacher at	250 00
1 teacher at	275 00

Supervisor's Report, Primary Grades.

REPORT OF THE SUPERVISOR OF PRIMARY GRADES.

To Superintendent W. E. Robinson.

The following report of the Primary Department of the Detroit Public Schools is respectfully submitted.

It affords me pleasure to be able to report favorably on the work accomplished during the past year. The teachers have done earnest, faithful and efficient work and through their intelligent efforts substantial and very satisfactory results have been obtained. The pupils have been contented and happy in their duties because of their deep interest in the subject matter presented and their growth has ben natural and spontaneous rather than forced.

The Grade Meetings have been particularly fruitful of good results. Three subjects. Psychology, Nature Study and Physiology, have been the branches studied by the teachers in the meetings. The work in Psychol-

ogy has been of a very practical nature. The aim has been to present some of the more important phases of mind growth in such a way that the teachers could understand their significance and make practical applications of them in their daily work with the children. This study of child nature and the laws governing mental development is of great value to teachers and cannot fail to render their instruction more intelligent. The study of Physiology under the direction of Miss Kimbertin has been very thorough and comprehensive, full of interest and help to the teachers and productive of good results in the teaching of this subject in the schools. The first and second grade teachers have given special attention to work in elementary science, or nature study, in connection with the lessons given in the grade meetings. They have done much in the way of outside observation and study, thus preparing themselves to better present the subject to the children in their respective schools.

The work done by the supervisors of special branches at the grade meetings has been uniformly good. Through this opportunity to guide and direct the instruction in these subjects increased efficiency has been brought about in the already excellent work done in the schools in music, penmanship, drawing and physical culture.

The Language work as outlined last year has been continued in the schools during the present year. History, literature and science have been made the basis of the work in oral and written expression, the first value in this work has been in the interest developed in these

subjects, thought has been evolved in the child's mind and this is the first essential to good work in training expression. Good expression is closely related to good thinking, no one can talk or write well who does not think well. The power to speak and write good English fluently and rapidly comes only through much practice and the continued work in expressing thought both orally and in written form is developing this power in our pupils. They are gaining the ability to speak and write rapidly and correctly. The progress along this line has been one of the marked features of the past year's work.

In conclusion allow me to express to the teachers and principals my sincere thanks for their hearty co-operation in the work and to the Superintendent my gratitude for his wise counsel and hearty support.

Very respectfully submitted,

MATHILDE E COFFIN.,

June 15, 1894.

SUPERVISOR'S REPORT, DRAWING

REPORT OF THE SUPERVISOR OF DRAWING.

To W. E. Robinson, Superintendent City Schools:

I feel that a successful year has just closed, many things having contributed to the advancement of our pupils in this department.

The furnishing of individual models to fifty of our schools has been a very great aid, providing, as they do, the type to which all natural and manufactured objects may be referred, and furnishing, also, a means for original investigation and thought. I would most earnestly ask that *all* buildings be supplied with these models before the close of the year.

It is further necessary that some material for color work be furnished to successfully carry out the work planned in the Course of Study.

Since color is so important a feature in the apprehension of things, progressive schools are making extended provisions for this all important division of the

work in form study. It is impossible to give proper color instruction without some acknowledged standard in the schoolroom; and this instruction to be of value should be based upon true psychological principles, color perception always preceding color expression.

I submit that no part of education should be trifled with; that nothing should find lodgment in a Course of Study or be undertaken in the education of the child which does not bring mental grasp, range of thought or accuracy That we are working along true educational lines, I think you will admit in looking over the work of the different grades; and that the broad scope of the work in drawing done in the schools, supplies a varied mental stimulus which manifests itself in increasing power of thought and expression in all branches.

I would especially commend to your consideration the excellent work done in the Normal Training School, and also the continued earnest effort of the grade teachers, without whose harmonious endeavor success would be impossible.

Before closing this report allow me to thank you most cordially for your unvarying and helpful assistance at all times.

Very respectfully submitted,

MYRA JONES.

Detroit, July 1, 1894.

SUPERVISOR'S REPORT, MUSIC.

REPORT OF THE SUPERVISOR OF MUSIC.

W. E. Robinson, Superintendent Public Schools:

MY DEAR SIR—I hereby report in reference to the department under my charge.

Since I have taken charge of the music there has been an improvement from year to year in proportion as the regular teachers become able in daily practice to carry out my instructions. It is very creditable to the teachers, including principals, that so many have taken special instruction to enable them to carry on the work more successfully.

During the last part of the present year there has been considerable effort made in the way of written examinations as well as oral which has been very beneficial. As in all the other branches when a certain amount of time is devoted to study, it is necessary that some test as to the exactness in progress should be made. This will be an incentive to the teacher to be exact in this branch as in all others.

Since Dr. L. W. Mason's return from Europe where he spent three years observing the best methods, he has spent some time with me in the schools and has shown me the improvements he has prepared for the primary grades, and which can be put into practice at once. These have been presented to some of the leading teachers in the country and have met with universal commendation. I feel that we have been greatly strengthened by Dr. Mason's visit with us.

Thanking you very heartily for your kind support and assistance and the teachers for their hearty co-opation in my work,

I am,

Yours very truly,

EMMA A. THOMAS.

Director of Music.

Detroit, June 21, 1894.

SUPERVISOR'S REPORT, WRITING.

REPORT OF THE SUPERVISOR OF WRITING.

Superintendent W. E. Robinson,

In submitting my report please allow me to call attention to some facts. When I began work in the Detroit schools I introduced abbreviated writing. At first many of the teachers said it did not look well, that words having the initial and final strokes cut off were not finished. But enough of our teachers were soon enlisted to make an experiment. I felt confident of success and persevered. One after another of the teachers saw the utility of the method and fell into line, until at the present time the teacher in Detroit who does not believe in abbreviated writing is an exception. This is not all, the spirit has gone abroad and many teachers in surrounding towns and country have adopted it. It is known as the Detroit method,

To facilitate matters in this direction I prepared a copy of the alphabets of both capitals and small letters, had them cut in wood and printed on manilla paper in

proper form to be pasted on the wall above the black board, so as always to be before the children. These were purchased during the present year by the Board of Education and placed in every room. This is not only a great help to the children, but a saving of the time required to write these copies upon the boards each term.

The results of this work are great plainness in all written work which means a saving of the teacher's time, and simplicity of form, admitting of greater speed, which means a saving of the pupil's time

During the month of May I made many tests of speed in all grades. The results were truly surprising. In fact, we had attained a rate of speed greater than I had ever hoped for, greater than I had ever seen on record from any school.

Children in the second grade wrote from 24 to 32 words per minute. In the third grade when ink is first used from 20 to 40 words per minute and in upper grades from 30 to 45 words per minute. This means good, legible, clear writing. It was astonishing. I had for some years the teaching of pupils from a telegraph college where legibility and speed were the essentials and where the pupils were adults, but I never succeeded in securing such results as I found among these children.

One thing I wish to mention is the fact that the children who were in the first grade when I came here are now either in the eighth grade or have graduated

from it, so that we may now see the results of the work after it has been followed through the whole course.

Some teachers advocate dropping the writing lesson after the fourth grade giving more attention to the miscellaneous writing. The trouble with this is that the time required to fix a habit of good writing is too short.

It is a fact which we have demonstrated quite thoroughly that the time given to the writing lesson, if the lesson is given in the right way, enables the pupil to do his miscellaneous writing in so much shorter time that the time spent in taking the writing lesson will be fully made up during the day. Hence, we think an average of twenty minutes every day through the eight grades advisable.

The matter of slant has been much agitated of late. We say briefly: Put the child into the proper position, simplify the form as much as possible and make him write as rapidly at all times as is consistent with good form, and slant will regulate itself.

During the past seven years 177 rooms have been added to the schools so that it requires more time to make the rounds, provided as much time be given to each room as formerly. But owing to the fact that the teachers are each year becoming more familiar with the work, it is not necessary to give so much time to each room. I have therefore gradually shortened the time so that the visits shall come as often as once a month.

During the year just closed I have visited regularly 498 rooms every twenty school days.

The former practice of examining and marking the writing of each individual pupil was a very laborious one and on the whole was not satisfactory.

This year I have pursued the plan of marking each room. All pupils were required to write specimens as formerly and these together with samples of some miscellaneous work were placed in my hands. From these I judged the standing of the room and placed a mark either upon the papers or upon the blackboard, indicating the standing of the room. This plan has seemed to give universal satisfaction both to teachers and pupils. I think it a much better plan than the other.

With the use of the broad-pointed No, 33 pens pupils are enabled to do their miscellaneous work with greater ease and more satisfaction to themselves and to the teachers generally so that the great bulk of the writing in our schools today is done with pen and ink.

Thanking you for your wise counsel and faithful support at all times.

I am yours very respectfully,

W. F. LYON.

Supervisor's Report, Physical Culture.



REPORT OF THE SUPERVISOR OF THE DEPARTMENT OF PHYSICAL CULTURE.

To Superintendent W. E, Robinson:

DEAR SIR—I have the honor to submit for your consideration the report of the Department of Physical Culture, including Physiology, in the Detroit Public Schools for the year ending June 22, 1894.

No previous year has shown such satisfactory progress in this work as the one just closed.

The pupils have manifested an interest in all the exercises and shown an appreciation of the benefits they have derived from the daily drills. Their enthusiasm over the study of Physiology in connection with the physical training has been unbounded. We hope that their knowledge of the laws of life and health will enable them to exemplify in their lives that oft-repeated maxim: "A sound mind in a sound body."

Ten minutes or more for physical exercises has constituted a part of the regular daily program in each

grade below the High School. The Supervisor has visited every school at regular intervals giving a lesson in each room, and correcting the work of the preceding month.

At the Grade Meetings, held every Friday afternoon during the year, special instruction in physiology was given, and all new exercises analyzed before they were presented to the pupils.

Some very excellent work in physiology has been done by the children, especially the third and fourth grades. Topics from the subjects of physiology were used in the language work and were illustrated by drawings.

The teachers generally have found the physiological charts indispensable. It has been noted that several of the teachers used the living tissue. In the seventh and eighth grades the pupils went a step farther and wrote compositions upon the history of physical culture. Some of the topics selected were as follows, namely: "The Olympic Games," "The Education of the Spartan Youth," "The Athenian Youth," etc.

All the work in this department has been judged by the same standard used in other branches of school work. Credit was given for work well done and a record of the same kept throughout the year.

Too often the work in physical training means consideration only for the well and strong. This should not be so. The weak ones should derive benefit from the drill, that is the work should be mod-

ified from time to time to suit the weakest in the class.

A large per cent of the pupils having defective vision are now either wearing glasses or being treated. Parents have kindly attended to this matter when requested by the teachers.

The following statistics represent a careful record of all apparent physical defects noted during the past school year.

Number of pupils having defective vision due to weakness, myopia, presbyopia, etc....	464
Number of pupils cross-eyed.....	160
Number of pupils having cataract or growth on the eye.....	15
Total number that need attention.....	639
Number of pupils now wearing glasses.....	475
Number of pupils who have the use of only one eye.....	16
Total number with impaired vision.....	1,130
Number of pupils deaf, due in most cases to scarlet fever or diphtheria.....	65
Number of pupils having defective speech....	208
Number of pupils having curvature of the spine or deformity of body.....	42
Number of pupils having crippled hands, feet or legs.....	166
Number of pupils having impaired nervous system, St. Vitus dance or paralysis....	296

Number of pupils having other ailments as rheumatism, consumption, heart disease, etc., most of whom are excused from exercises	48
Number of children weak-minded	127
Total number of children with physical defects.	2,082
Number of children enrolled	31,035
Number of children in normal condition and able to take the exercises	28,953

Physical Training viewed from an educational standpoint is now a regular branch of study in public schools.

It was the Supervisor's privilege to attend the Congress of Physical Education last July in the City of Chicago. A most interesting feature of this meeting was the papers and addresses by men and women who are connected with various schools of physical education in other countries, as Sweden, Denmark, Germany, France, Italy and England.

The united expression from all these teachers was the necessity of considering this study *scientifically*. One of our American teachers, Dr. Wood, most aptly expressed the sentiments of that grand Congress in the following manner: "If our science is to be worthy of the best efforts of men and women, and of the

educational world, physical education must have an aim as broad as education itself, and as noble and inspiring as human life. The great thought in physical education is not the education of the physical nature, but the relation of physical education to complete education, and the effort to make the physical contribute its full share to the life of the individual in environment, training and culture."

In this remark he simply reiterates what Dr. G. Stanley Hall says on this same subject, namely: "It is seen that the most perfect physical development involves the choicest knowledge, the best morals and religion."

Where then could we better begin this course of scientific instruction than in our public schools. It is conceded by all educators of to-day that physical training is highly essential in securing health, increasing knowledge and strengthening the moral character of the child.

It was my desire and purpose to present a fuller report of the work in this department, but much time was spent in preparing the detailed course of study, making necessary the brevity of this report.

I desire to express to you my highest appreciation of your kindness and helpful advice at all times. Your hearty co-operation has been an encouragement

and an inspiration to seek only the best and highest principles in education.

Respectfully submitted.

NETTIE D. KIMBERLIN.

June 26, 1894.

REPORT OF TRUANT SCHOOL.

REPORT OF TRUANT SCHOOL.

To Superintendent W. E. Robinson:

The following report of the Detroit Truant School for the year ending June. 1894, is respectfully submitted:

The year has been a prosperous one in many respects as compared with the preceding year. While the number reported for truancy from the other schools has exceeded that of any previous year, yet our enrollment has diminished and the daily attendance has greatly increased. This can be accounted for by the statement that the principals have been more prompt in reporting truants and not waiting until the habit of truancy became fixed. While there has been a marked improvement in this respect it has not been overdone and there is still great room for improvement. If truants are reported at once it will have a tendency to decrease the enrollment at this school.

During the year many cases have come to our

knowledge of boys who had been truants from four to six weeks and had not been reported from their schools. It seems possible that some plan might be devised whereby principals might keep themselves informed regarding all cases of absence and truancy. It is much easier to prevent pupils from becoming truants than it is to reform them after the habit has become chronic.

The officers have been faithful in the performance of their duties as far as permitted by their superiors. It is a matter of much regret and a great disadvantage to the successful operation of our school that we have not full control of the truant officers. Five officers have been appointed for this work but they do school work only when there is no other work for them to do and consequently our work is often neglected. It would be to the interest of our school if some arrangement could be made whereby we could have the whole service of the truant force or else have the number so increased that they could perform other duty when called upon without neglecting school work. This matter has been brought to the notice of the Board of Education several times and a committee appointed to confer with the Superintendent of Police, but said committee neither investigated nor reported.

Each year as our school draws to a close, I am asked by many anxious parents if our school keeps open during the summer. A large number of our boys ought to be looked after by the officers and it can be done no where so well as by attending this school. If we do not succeed in obtaining a law for the establishment of a parental school, I think it would be well to try the

experiment of keeping this school open during a part of the summer.

I can speak in the highest terms of the teachers employed in this school. They have at all times been faithful in the performance of their duties and take a commendable interest in every pupil given into their charge, looking after their moral as well as their intellectual growth.

The total enrollment for the school year was 379, of which 354 were boys and 25 girls; 154 were received by transfer from other city schools. Of the entire enrollment 118 were in attendance at the close of the school, 139 were returned to the city schools, 90 were released to go to work, 20 had left the city, 11 were sent to the Industrial School at Lansing for truancy and 1 was drowned.

During the year the Truant Officers have made 4,184 visits and have served 376 notices; 598 truants were reported from the other schools.

Very respectfully,

MILTON J. WHITNEY, Principal.

NORMAL TRAINING SCHOOL REPORT.

!

NORMAL TRAINING SCHOOL REPORT.

W. E. Robinson, Superintendent of Schools:

I submit the following report of the Normal Training School for the year ending June 22, 1894.

The number of students belonging during the year was one hundred and one, thirty-nine of whom were graduated from the school.

The class admitted in September was the largest in the history of the school. It consisted of twenty-seven members. Nineteen of these entered on recommendation from the High School. Later in the term one removed from the city and another from illness was obliged to leave the class but continued her work with the next. Of the remaining twenty-five twenty-three received certificates. A graduate of the State Normal School who had had no experience in teaching in the public schools, entered the class the second term and received a certificate.

The class entering in February consisted of twenty

members. Fourteen of these entered on recommendation.

The standard of scholarship indicated by the number recommended in the two classes made it possible to do more advanced work than would have been possible, except with individuals, in former classes.

The plan of allowing students from the High School recommended to the University, to enter the Training School without examination has already shown good results.

In the practice School, the sixth grade has been added, giving us four classes in the A room. This made it necessary to have a recitation teacher. One of the members of the A Normal Class was taken in the second term for this position.

To meet the need of practice in managing a larger number of children than the Normal School affords, the students have practiced through the B Sixth grade, in the Tappan School. We are greatly indebted to Miss McKerrow, the principal, and to her teachers, for the willing co-operation and great kindness shown us while carrying on our work there. The students have found it very beneficial to have the large classes to manage which the Tappan school supplies.

Needs mentioned before and still unsupplied are: A kindergarten, a monthly fund for books and magazines, and an extension of time for the theoretical work. The last is becoming imperative.

The experimental work explained in my last report

has been carried on with increasing satisfaction. The fundamental ideas I believe correct. Attention has been given this year principally to the method of presentation of the subject matter by the teacher, and to the expression by the pupils of the impression received.

I will take a little space to explain the two fundamental principles referred to in my last report, namely: (1) Knowledge is valuable only as it is organized and results in expression.

If the only valuable knowledge is knowledge that has been organized, it is important to determine how such organization may be affected. We may start with the assumption that much depends on the way in which the subject-matter is presented. If facts are shown to the pupil as isolated, as fragmentary, as unorganized, it is clear that in most cases the pupil's ideas about these facts will be isolated, fragmentary, unorganized. If, on the other hand, these same facts are presented to him in their organic relations, if they are exhibited to him as forming a system, or rational sequence, or process of development, it stands to reason that the pupil's mind, playing freely upon facts thus arranged, will receive an impulse towards orderly activity.

Further, these facts must be so organized that they will be adapted to the special requirements of the pupils with whom the teacher is engaged. This can be done with complete success only by a study of the mind of the child. The teacher should determine by investigation the knowledge the child possesses, in what degree he possesses this knowledge, and how much may be

presented with hope that it will be assimilated. She should also determine differences in the capacity of children as regards receptivity and expression. Finally the question how the most perfect expression may be secured, and knowledge thus be made permanent, must not be overlooked.

In carrying out investigations along these lines, many variations have been made from the usual programmes of primary instruction. The conventional barriers of the daily schedule have been broken down to a great extent and a subject studied until the children manifested the necessity for change; or a subject presented in one lesson has been carried on into another and made to involve both expression and application. An effort was made to secure from every member of the class expression of what had been presented, before the class was released from recitation and the impression had had time to be effaced. In the attempt to reach each child and meet his particular needs, after the point of the lesson had been presented to the class as a whole, the teacher secured expression first from the readiest and these were allowed to do extra or other work in order that the teacher might give more attention to those in special need of help.

(2.) To attain the purpose of education, the individual must be prepared to perform his function in all relationships. Under this point the following suggestions are noted: There is nothing more important than that the individual should comprehend his relationships, and so act and re-act in these as to produce the great-

est good for himself and others. One cannot act intelligently in these relationships until he is conscious of them, nor can he comprehend at once all that is involved. He must be led from simplicity to complexity. To attain the most in each relationship the ideal conduct for that relationship must be perceived.

To put this thought into practice, the plan which is followed in the primary grades in the study of life, is thought to be a good one for the grammar grades. That is to say, instead of studying physical environment in detail as preliminary to the study of the people in geography, only the essential features are studied, and these briefly. The pupil then passes on to study life in its relation to physical environment, the emphasis being thrown on this side of the work. The past literature of a people, showing their ideals as expressed by themselves may be contrasted with history which shows how far their ideals have been realized. In like manner the literature of our own time in which our modern ideals are embodied may be contrasted with the literature of the times. Thus we may bring out differences in the ideals of life at different times, and so enable the children to become conscious of their own views of life and to modify these views in accordance with the needs and standards of the society in which we live.

Respectfully.

HARRIET M. SCOTT,

Principal Normal Training School.

Principal's Report, High School.

REPORT OF THE PRINCIPAL OF THE DETROIT HIGH SCHOOL.

Detroit, June 22, 1894.

Superintendent W. E. Robinson,

The year now completed has been a second somewhat remarkable one for the High School. The fire of January 27, 1893, has left behind it much that has affected the work of the school up to the present time, Our temporary home, the Biddle House and Beechers Hall, we found, after a semester's experience, to need many changes to make it fit for continuous occupation.

Early in the year I called the attention of the Committee on Real Estate and School Buildings to the unsanitary condition of the building, and recommended many improvements. The most important of these improvements were to be in the heating and ventilating of parts of the building. The Committee and the

Board went beyond what I had felt safe in recommending and equipped a large part of the building with the Huyett & Smith blower system of heating and ventilating. While possibly in extremely cold weather some parts of the building may be inadequately heated, the system in general has worked admirably. The ventilation of the greater part of the building is better than that of an old building, and, I have no doubt, better than the majority of school buildings in the cities of the state

At the same time that this work was done an assembly room was fitted up for the Twelfth Grade by removing certain partitions in the fourth floor of the building. At the same time a recitation room and an apparatus room for physics were fitted up on the same floor. Thus most of the work of Twelfth Grade students was placed on this floor and that immediately below, and stair climbing was reduced, although the assembly room was placed one floor higher than before, while we gained a pleasant and well-lighted and well-heated and ventilated assembly room for the Twelfth Grade. I need not speak at length of the thorough cleaning out of the basement at the time the other changes were made. While before it was a receptacle for years' accumulation of rubbish full of dirt and foul smells, after the improvements it became a well-aired and wholesome place. While the building is inconvenient and in many ways ill-adapted to our use, I think that at present it can surely be called safe from a sanitary point of view.

One of the most important improvements made at

the time referred to was the building of a stairway leading to the Woodbridge street level of the building from the Ninth and Tenth Grade assembly room. Until this was done I never felt easy for a moment thinking of the possible danger of a panic in case of fire. After it was done I felt little uneasiness, a change of feeling justified by facts that developed later. As soon as the improvements were completed and school work resumed after a two weeks interruption I began the preparation of directions for a "fire drill," as it would be modified by the changed condition of the building. This was completed on the morning of November 23, 1893. That morning I shortened the session fifteen minutes. At the close I gave the signal for a teacher's meeting at which to give the directions for the new fire drill. I was interrupted by shouts in the street, and looking out of the window saw flames bursting from the upper floor of the Edson, Moore & Co. building a block below us. The meeting was omitted. I need not speak of the horrors of that fire which are only too well known. The next morning it was evident that something much like a panic was pervading the school, and especially the Ninth and Tenth Grades. I spoke to them somewhat at length, and showed them the construction of the building, cut up as it is into many parts by brick walls extending from basement to roof and absolutely free from inflammable material, such as worked such rapid destruction in the fire of the day before. This had the effect of allaying the excitement as the students were convinced that there was little real danger.

But almost immediately the papers spread the

alarm and a genuine sensation was made over the dangerous condition of our quarters in case of fire. Article after article appeared until many people were seriously alarmed, but mostly those not having children in the High School. Two pupils *from one family* were actually removed from school because of the supposed danger. During all this time the students of the school pursued the even tenor of their ways without fear. Numerous fire drills showed them that the exits were so numerous that there could be very little danger,

A fire drill is largely a drill of absolute obedience. Students are directed to obey absolutely without question whatever directions are given by the teachers. Certain directions are given in advance, but students are warned that in an emergency directly opposite instructions may be given and that they must be obeyed. Various expedients have been tried. For instance, a newspaper foretold the dire consequences that would result if a certain sliding door at the foot of a certain stairway should fail to slide at the proper time. It failed to say that there was an archway opening on the other side of the same stairway with a door which is never closed. It also spoke of the danger because the front doors of the main entrance ordinarily opened inwards although they also open outward. I therefore on one occasion nailed up the door at the foot of the stairway and posted boys at the main entrance with directions to appear to find difficulty in opening the doors. I then, without warning to anyone, teacher or students, gave the fire alarm. The building was emptied in two minutes and thirty seconds. The main

front doors being closed pupils simply passed out through the *four* other front exits through the stores used as assembly rooms for the Eleventh Grade. Much was said about the danger to pupils on the upper floors of the hotel part of the building. The Beecher estate opened doors into the hotel at the end of our halls in the second. third and fourth floors, By these exits it was found on repeated occasions that this part of the building could be emptied in thirty seconds from the first stroke of the alarm and the entire building in a minute and a half. Most alarming things are foretold of the results of a panic in the large assembly room. In fact there are only ten minutes in the day when there are more than about two hundred seated in the room although the room actually seats over a thousand. Just before recess for ten minutes all are present. Frequent drills showed that the room at this time could be emptied in less than one minute without difficulty and without undue confusion. In view of all those facts it is not strange that ideas of danger quickly passed from the minds of the students.

The Board of Education showed a determination to run no needless risk and $2,000 were expended in furnishing the building with admirable fire escapes. In addition several changes were made in the interior arrangement which facilitated the rapid movement of students and thus add to ease of escape in case of danger. It would be hard to plan a building in which there would be less danger in case of fire than in that we now occupy.

The table on pages 121 & 122 will show the growth of

the school for the past twelve years. I must especially call your attention to the remarkable increase for the present year. Certainly sensational reports as to the unsafeness of our present quarters do not seem to have caused any widespread alarm if we may judge by this increase. Up to the present time the largest increase in enrollment was 131 or 10-74 per cent for 1892-93 over the preceding year, and the next largest was 102 or 9.78 per cent for 1890-91 on the preceding year, while the largest percentage of growth in any year was 10.94 per cent for the year 1888-89 over the preceding year. This year our enrollment has reached 1,595, an increase of 245 or 18.14 per cent on that of the year ending June 1893. If this growth is to continue and reason says it will, we shall need additional room in the immediate future, new rooms must be rented adjoining those now used. Our rooms are so greatly overcrowded and our classes are too large for the best work in many subjects.

All this leads us to hope that the question of the site for the new Central High School may be settled as soon as possible and the building pushed on rapidly to completion. Even that building would accommodate few more than we now have in the school. The East and West Schools will be needed as soon as the Central building or soon after.

During the year an attack was made on the High School in certain quarters claiming again that it is a class school, a school in which the children of the rich are educated at the expense of those of more moderate

means. At the request of members of the Board I prepared a report which was submitted to you and which I beg leave to insert in part, here, that the facts therein given may be preserved. This report was afterward criticized as being founded upon an "inquisition" into the circumstances of children who might feel hesitancy at telling their parents' business. To any candid person the first part of the report should be a sufficient reply to these charges. To the friends of the school the report furnishes facts that must silence the talk about a "class school." Enemies of the school masquerading as friends can only find fault with the report itself. Following is the report:

DETROIT HIGH SCHOOL Detroit, Mich., March 8, 1894.

Superintendent W. E. Robinson.

DEAR SIR: It has been recently stated publicly that the High School is a class school, and not the thoroughly democratic institution that the public schools must be if they are to receive public support. It has therefore seemed wise that some investigation of the matter be made. A table showing the occupations of parents of all students in the High School has accordingly been made. To aid in making this table a blank was prepared in two parts. The first part contained simply a statement that the report on the other half was correct, and was signed by the student making the report. The second part contained these questions: First, "What is your fathers's business?"; second, "Is he employed at a salary or wages by some one

else?"; third, "If your father is not living state your mother's occupation." The two parts of the report had duplicate numbers so that obvious errors could be verified. It was, however, stated that the reports would be regarded as confidential, and that the two parts would not be compared unless there was difficulty in understanding the main part of the report. The only comparison made was in the case of those reporting mothers as widows. The number seemed so large as to cause suspicion of error Verification by enrollment cards, however, showed the report to be correct. It will thus be seen that no student, however humble his father's occupation, need have any sensitiveness about making the report, as there was no possible publicity about it.

The classification of the reports has been very difficult, but still it will serve to show the varied walks of life represented in the school. Among merchants, for example, are many who are merchants in a very humble way, "Clerks and salesmen," numbering 67, include very varied occupations. "Mechanics and Artisans," numbering 110 include all sorts of manual occupation above mere day labor. "Manufacturers," numbering 40, include many who were hard to classify, but who are manufacturers in a very small way, involving small capital. The report included 1,271 students. The actual enrollment is about 100 more than this, but the report was made one day and no attempt was made to secure reports from those absent on that day.

Table of Occupations of Parents of Students of the Detroit High School, February, 1894.

Abstract Office, 2.
Architect, 4.
Army Officer, 4.
Agent, 9.
Baker, 8.
Bank Cashier or Teller, 6.
Banker, 2.
Barber, 3.
Blacksmith, 3.
Bookkeeper, 15.
Brewer, 3.
Butcher, 7.
Capitalist, 2.
Captain and Vesselman, 7.
City Fireman, 8.
Civil, Mechanical and Electrical Engineer, 15.
Clergyman, 25.
Clerk and Salesman, 67.
Coachman, 2.
Coal and Wood Merchant, 3.
Collector, 3.
Contractor and Builder, 26.
Custom House Officer, 5.
Day Laborer, 12.
Dentist, 3,
Druggist, 9.
Dry-goods Merchant, 5.
Expressman, 5.
Express Messenger, 1.

Farmer, 15.
Foreman, 27.
Furniture Dealer, 3.
Gardener, 3.
Grocer, 29.
Hardware Merchant, 2.
Hotel Keeper, 2.
Inspector, 11.
Insurance Agent, 19.
Janitor, 3.
Journalist, 4.
Lawyer, 28.
Liquor Dealer, 11.
Locomotive Engineer, 6.
Lumber Merchant, 11.
Mail Carrier, 4.
Manufacturer, 40.
Marine Engineer, 5.
Mechanic and Artisan, 110.
Merchant (miscellaneous) 28.
Merchandise Broker, 3.
Merchant Tailor, 8.
Milkmen, 2.
Night Watchman, 6.
Painter and Decorator, 13.
Peddler, 3.
Physician, 26.
Plumber, 4.
Policeman and Detective, 8.
Printer, Publisher, etc., 11.
Produce and Commission Merchant, 16

Real Estate, 34.
Restaurant, 2.
Retired, 18.

Railway Employes { Official, 17. Clerk, 22. Conductor, 5.

Sailor, 3.
Shoemaker, 8.
Stationary Engineer, 19.
Shoe Merchant, 10.
Stenographer, 2.
Street Car Conductor, 1.
Superintendent, Manager, etc., 56.
Teacher, 4.
Teamster, 14.
Tobacco Dealer, 7.
Traveling man, 61.
Undertaker, 2.
Unemployed, 56.
Vessel Owner, 3.
Wholesale Merchant, 25.
Widows (unemployed), 105.
Widows (employed), 36.
Miscellaneous, 20.
Orphan (neither father nor mother), 16.

I think the bare statement of the facts is sufficient to show the varied character of interests represented in the High School. If there is one thing that the school is not, it is not a school for any class to the exclusion of others. Here the poor and the rich are on an equal footing. A student's position in the school

depends entirely upon what he is and what he does. There are several who are not even able to furnish their own books. But their position in the school is equal to that of the son of a millionaire, if their work be equally good. Not even their teachers know that they are supplied with books by the Board.

In my annual report for 1889, a table similar to that appended here was given. It showed just about the same variety in occupations that is shown now. Possibly I may be pardoned for quoting the comment made at that time. "The truth is, the High School is a school for all classes, and this is its glory. Here are the children of the rich and of the very poor, and there is no doubt that each class obtains good from the association with the others. It is merely merit that gives rank here, which is more than can be said of the world at large. If there is any spot that can truly be called a Republic of Letters, it is a good American high school."

Very respectfully yours,

Principal, Detroit High School.

A writer something more than a year ago alleged that the chief aim of the High School was to prepare students for college. Quotations were made from the catalogue to substantiate this charge. Such an idea could be the result only of a very superficial examination of the school as it is. The catalogue necessarily made frequent reference to college preparatory work, as students preparing for college must have intelligent

information on which to base their plans. This work is recognized as an important work of the High School. Perhaps its importance may be growing as with the greater maturity of the city a constantly increasing number of young men and women will look to a college training as a necessary part of their education. The school that neglected this important part of its work would be unfit for a position in the educational system of Michigan, a system which from the start has recognized the University as just as integral a part of itself as it has the primary school. The Detroit High School is, however, permantly a school for Detroit, and just as long as a considerable part of its students finish their final education here, just so long must the work of the school be adapted to the needs of these students. The school has no sympathy with educational quackery, which—prating of the practical, that American fetish before whose altars so many able minds have been thrown away—demands that all subjects involving training, and broadening culture be eliminated from the curriculum, and that numerous short roads to wealth be opened to the young traveler on the educational highways. The wealth sought is usually like the pot of gold at the foot of the rainbow, just beyond; and the graduate of the easy practical school from which mental discipline has been eliminated finds that if he is to succeed he must obtain the mental discipline in the hard school of daily life or his work will be a failure

Criticism was also made by the same writer on the rules for choice of studies by Specialists. A real examination would show any one that these rules are all

founded on reason, While students are not required to take the regular course there must necessarily be some sequence in their work. Not long ago a father thought the rule very unreasonable requiring that courses 2 and 3 in Physics be preceded by a certain amount of mathematical work. Had he known anything about the subject he would have seen that the Physics work depends absolutely on the mathematics. So with regard to French and German. These languages doubtless can be taught to young children, but the method must necessarily be different from that adopted with students in the Eleventh Grade. It must then be demanded that specialists have a certain amount of High School work before they go into classes with regular students who have had two years of High School work. Otherwise their lack of maturity would so interfere with the class work as to be unjust to regular students.

As a matter of fact, there are few schools in which so great freedom of choice of studies is permitted as we present here. As was pointed out in the report for 18-- each subject goes by its own merits and a student's work in any class is in no way dependent on his work in any other subject. If he is successful in mathematics but deficient in English, he goes on with his mathematics and reviews the English. A student's grade depends on the amount of work actually done rather than in his having passed in certain studies. It would be hard to devise a system more flexible than ours or more adaptable to the needs of individual students.

The year has been one of substantial gains in

scholarship. The second semester of last year was badly broken as a result of the fire. The novelty of the situation in the Biddle House led students to feel that school was hardly a serious matter while on the surface things seemed to move along as before, there was in many ways a decided letting down in the general tone of the school much ground has been regained this year. Never before has there been so continued an effort to look after the work of individual students. The results are most encouraging. We have had a smaller nnmber of failures than before. (No. 1.) The system of monthly reports of students' work by teachers to grade principals has been continued and has been a great aid in looking after the needs of students. At any time in the term a grade principal can tell at a glance the character of the work of all students of the grade.

In a school as large as ours there must always be some worthless characters. As we are so situated we have no room for the idle or the thoughtless. After repeated warning and untiring efforts to make something of such boys and girls. if failure follows, they should be compelled to withdraw to make room for those who are willing to do the work required of them. The industrious and studious should not have their work injured by the presence in their classes of the chronic "dead beat" who always demands a large part of the teacher's time and nervous energy. Such characters have no right in the High School and should be dealt with mercilessly. I need not say that I do not include in this class the plodding, dull student who is doing his best. All patience and consideration may

rightly be demanded in his behalf,

Another matter of most serious importance has been the presence of petty thieving in the school during the year. It always prevails to a greater or less extent in a large public school, but this year we have had an unusual amount of it. It is almost impossible of detection. Our cloak rooms are so situated that it is difficult to watch them and they are unfortunately exposed to the depredation of thieves from the outside. After repeated warnings girls will leave pocketbooks with money in them in their cloak pockets and it is frequently stolen. I hope to devise means next year of detecting the thieves. It is humiliating to know that we have among us students who have been with us for years who are simply sneak thieves, and yet the evidence of this is absolute. But no effort has enabled us thus far to detect any one.

The whole year has been shortened by two weeks owing to the closing of the building for repairs in October. I cannot see but we have accomplished about the usual amount of work. This would be a strong argument in favor of the ideas of those who favor the shortening of the school year to thirty-eight weeks I cannot help thinking the matter worthy the most serious consideration. If we could begin a week later and close a week earlier we should avoid extremely hot weather at each end of the school year. People can hardly realize generally what it means to herd children in school rooms in the sweltering weather that we usually have in early September and early June. The High School

has been deeply afflicted during the past year by the death of two of its teachers. George Henry Stone who died September 15th, when the year had scarcely begun had been in the school but a year and a half. He was a young man of the highest personal character and one whose influence was for the best on the young people who came in contact with him. He was untiring in his devotion to the interest of his pupils. His unselfishness was shown in his readiness to work outside of school hours with those whom he could help. He gave his time freely to more than one in private tutoring entirely without pay because he knew that they needed the work and could not afford to pay for the services of a tutor. This is the spirit of true teachers. It is unfortunate that it is somewhat rare and hence worthy of special mention. In every relation Mr. Stone was a man of unfailing devotion to duty and unswerving integrity.

Mary C. Leete died January 21, 1894. Her death came with a shock of surprise to every one. She was in school two days of the week ending with the Sunday on which she died. Mrs. Leete had been a teacher of the High School for ten years and a half, and for nine years before had been a teacher in the Cass School. It is needless for me here to attempt anything like a tribute to her character. It is enough to say that all that was said of her at the time of her death was strictly true, and that the half was not told. We can hardly estimate her loss to the school. Her teaching was of the highest character, while her personal influence was elevating and enobling. The simplest statement of facts concerning her would sound like fulsome flattery

of the dead, and I will not offend her modest nature in this way. It is gratifying to know that her name will live in the school in the establishment of the Mary C. Leete memorial scholarship by the Board of Trustees of the Scholarship fund for one graduate in the University. The work thus carried on in her name will be as fitting a memorial as could be made of a faithful and devoted teacher.

Very respectfully yours,

FERDINAND L. BLISS

Principal of the Detroit High School.

TABLE OF MEMBERSHIP BY CLASSES AND COURSES OF STUDY.

Complete Enrollment for Second Semester, 1893-94.

COURSE OF STUDY.	CLASSICAL.			LATIN.			SCIENTIFIC.			ENGLISH			COMMERCIAL			SPECIAL.			TOTAL.		
GRADE AND CLASS.	Boys.	Girls.	Total.	Boys.	Girls.	Total	Boys.	Girls.	Total.	Boys.	Girls.	Total	Boys.	Girls.	Total	Boys.	Girls.	Total.	Boys.	Girls.	Total.
9 B	13	2	15	30	50	80	66	29	95	27	116	143	29	9	38	4	5	9	179	211	390
9 A	14	6	20	17	35	52	28	24	52	17	81	98	24	7	31	2	14	16	103	167	270
10 B	6	3	9	14	31	45	27	10	37	13	62	75	17	4	21	14	11	25	91	121	212
10 A	8	7	15	13	18	31	15	4	19	7	50	57	9	6	15	6	7	13	58	96	154
11 B	3	1	4	4	28	32	7	7	14	8	36	44	3	3	6	6	5	11	31	80	111
11 A	3		3	9	11	20	9	6	15	3	32	35	8	2	10	6	2	8	38	53	91
12 B	7	3	10	8	9	17	8	4	12	9	27	36	5	2	7	1	1	2	38	46	84
12 A	8	7	15	6	16	22	1	1	2	4	12	16	1		1	..			19	36	55
P. G	2		2	5	3	8	1		1	4	2	6	1		1	..			13	5	18
Total	62	27	89	113	203	316	166	85	251	92	418	510	97	33	130	40	45	85	570	815	1385
Total for year																			629	916	1 545
Graduated (first semester)	2		2	5	9	14	1	1	2	8	13	21	1	1	2				17	24	41
Graduated second semester	10	6	16	10	17	27	5	2	7	5	21	26	2		1				31	46	77
Graduated total for year	12	6	18	15	26	41	6	3	9	13	34	47	2	1	3				48	70	118

NUMBER OF STUDENTS ENROLLED IN VARIOUS STUDIES OF THE DETROIT HIGH SCHOOL,

School Year 1893-94.

	FIRST SEMESTER.			SECOND SEMESTER.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Algebra, 1,	142	165	307	189	210	399
" 2,	96	138	234	111	158	269
" 3,	53	87	140	71	115	186
" " 4,	21	19	40	35	26	61
Arithmetic, 1,	19	63	82	29	66	95
Bookkeeping, 1,	14	11	25	30	8	38
" 2,	13	7	20	9	7	16
" 3,	5	3	8	9	4	13
Botany, 1,	40	79	119	50	90	140
Chemistry, 1,	23	36	59	28	44	72
English, 1,	164	193	357	184	231	415
" 2,	45	131	176	72	110	132
" 2a,				9	5	14
" 3,	24	89	113	29	90	119
" 4,	1	7	8			
" 5,				5	15	20
French, 1,	11	25	36	17	23	40
" 2,	7	16	23	11	16	27
" 3,	5	13	18	6	11	17
" 4,	1	9	10	2	16	18
Geometry, 1, & (2)	46	63	109	39	79	118
" 3,	26	44	70	37	49	86
" 4,	20	16	36	27	25	52
Greek, 1,	5	2	7	10	7	17
" 2,	6	5	11	5	2	7
" 3,	11	6	17	6	3	9
" 4,	2	1	3	12	7	19

DETROIT HIGH SCHOOL ENROLLMENT IN VARIOUS STUDIES, 1893-94.

	FIRST SEMESTER.			SECOND SEMESTER.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
German, 1	25	36	61	27	46	73
" 2	25	22	47	22	34	56
" 3	18	20	38	20	21	41
" 4	13	15	28	18	21	39
History, 1	73	122	195	70	131	201
" 2	23	49	72	23	63	86
" 3	23	36	59	27	46	73
" 4	29	37	66	25	42	67
" 5	8	30	38	18	30	48
Latin, 1	98	84	182	126	102	228
" 2	60	59	119	78	79	157
" 3	48	60	108	44	47	91
" 4	24	40	64	28	40	68
" 5	18	18	36	6	26	32
" 6	10	13	23	18	16	34
" 7	21	16	37	8	12	20
" 8	9	16	25	17	14	31
Physics, 1	29	67	96	31	70	101
" 2	60	88	148	5	4	9
" 3				59	86	145
Physiology, 1	56	106	162	64	127	191
Psychology, 1	4	17	17	2	19	21
Reading, 1	226	150	150	159	195	354
" 2	68	139	139	91	148	239
" 3	17	44	44	16	71	87
" 3a	21	31	31	14	37	51

DETROIT HIGH SCHOOL ENROLLMENT IN VARIOUS STUDIES, 1863-94.

	FIRST SEMESTER.			SECOND SEMESTER.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Rhetorical Wk, 2,.....	83	127	210	110	139	249
" 3,.....	52	103	155	68	95	163
" 4,.....	49	76	125	50	99	149
" 5,.....	27	49	76	25	65	90
" 6,.....	29	42	71	19	40	59
" 7,.....	31	37	68	27	37	64
" 8,.....	20	28	48	33	46	79
Trigonometry, 1,.....	.....	.....	.....	10	0	10
Zoology, 1,.....	33	65	98	34	65	99

TABLE SHOWING BY GRADES AND CLASSES THE WHOLE NUMBER ENROLLED IN THE HIGH SCHOOL, AND THE NUMBER GRADUATED FOR EACH SEMESTER OF THE PAST TEN YEARS.

TERM ENDING.	9 B.	9 A.	10 B.	10 A.	11 B.	11 A.	12 B.	12 A.	Special.	P. Graduate.	Total.	Total enrollment for year.	Yearly percentage of increase.	Average membership.	Percentage of increase of av. membership.	Graduated.	Graduated total for year.	Average attendance.
January, 1883	129	117	86	62	51	45	59	25	37	9	620					23		
June, 1883	153	97	70	61	44	45	37	54	100	12	673	702		558		40	63	545
January, 1884	131	104	86	54	43	35	48	30	68	15	614					29		
June, 1884	116	103	66	65	43	27	28	48	110	9	614	743	5 84	548	—1.77	47	76	535
January, 1885	160	86	63	70	62	28	24	28	73	8	602					24		
June, 1885	195	119	96	76	40	68	23	31	23	12	683	784	5 50	584	6.57	24	48	564
January, 1886	181	110	109	67	67	44	45	20	28	16	687					17		
June, 1886	181	121	101	85	63	50	40	43	28	13	725	839	7.01	584	0	35	52	564
January, 1887.2	176	108	86	89	61	37	43	34	23	8	665					29		
June, 1887	168	126	83	76	91	56	27	44	24	17	712	833	—.71	622	6.50	34	63	601
January, 1888	160	114	75	70	77	62	48	19	27	11	674					24		
June, 1888	206	107	87	76	56	63	62	43	41	14	755	869	3 10	644	3.53	36	60	625
January, 1889	228	137	87	61	73	45	56	49	25	14	775					43		
June, 1889	236	137	110	77	66	54	69	56	29	27	831	963	10 94	723	12.27	51	94	697

TABLE SHOWING WHOLE NUMBER ENROLLED, ETC.—Continued.

TERM ENDING.	B 9	9 A.	10 B.	10 A.	11 B.	11 A.	12 B.	12 A.	Special.	P. G.	Total.	Total enrollment for year.	Yearly percentage of increase.	Average membership.	Percentage of increase of av membership.	Graduated.	Graduated total for year.	Average attendance.
January, 1890	249	158	112	87	75	44	59	33	0	17	834	.....	.....	.....	. ..	31	....	. . . .
June, 1890	276	153	147	102	82	52	61	16	0	10	859	1042	9.33	780	7.80	33	67	754
January, 1891	278	188	135	101	83	68	48	16	0	16	935	.....	.....	.. ...	.....	24	....	. ...
June, 1891	279	191	159	101	72	67	62	28	0	14	973	1144	9.78	953	9.30	39	63	829
January, 1892	284	178	139	121	90	59	74	24	0	12	980	....	.....	.....	.....	30	.....	.. ...
June, 1892	310	188	151	116	104	65	59	49	0	15	1057	1219	5.67	935	9.61	64	94	919
January, 1893	327	223	....	.....	97	73	...	. .	.....	.....	1058	.....	.....	.. ...	.....	24	... ..	.....
June, 1893	342	246	200	100	104	90	74	34	0	4	1194	1350	10.74	1017	8.76	42	66	981
January, 1894	....	.....	.....	....	.....	.....	.. ...	.....	.....	.....	.....	....	.....	.....	.....	41	.....	.... .
June, 1894	390	270	212	154	111	91	84	55	0	18	1385	1595	18.14	.....	....	77	118	.....

❋ Course of Study. ❋

OUTLINE OF THE COURSE OF STUDY

FOR

PRIMARY AND GRAMMAR GRADES.

September, 1894.

B CLASS—First Grade.

LANGUAGE—Daily work in copying sentences from the blackboard. Capitalization and punctuation of simple sentences taught by imitation.

Daily lesson in oral language; lead children to express themselves clearly, correctly, and completely in these conversation lessons.

Material for oral lessons:

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Fairy stories and myths.
5. Elementary Physiology.

6. Picture lessons.
7. Poems.

See detailed course in Language.

READING—

Appleton's Chart, 20 lessons.
Appleton's First Reader, begun.
Barnes' First Reader, begun.

Supplementary work:

Harper's First Reader, begun.
Normal Course First Reader, begun.
Blackboard lessons Science and history.

See detailed course in reading.

SPELLING—Vocabulary consists of all new words in reading work of grade as outlined in detailed course.

Children should copy correctly in sentences all words in grade vocabulary, also write from dictation all words in chart vocabulary.

Spell by sound all analyzed words,

NUMBERS—1 to 6, inclusive, all combinations.

Fractions—½ and ¼.

Compound Numbers—Pint, quart, 2 pints = 1 quart; linear inch; square inch: pieces of money, one cent, two cents, three cents, one dollar, two dollars, three dollars; postage stamps, one cent and two cents.

Measure by inches to six inches.

Measure by square inches to six square inches.

See detailed course in numbers.

PHYSICAL CULTURE AND PHYSIOLOGY—Simple

limb movements, also correct sitting and standing position. See work of grade in detailed course.

Name and number of different parts of the body.

The Eyes:

1. Importance and situation.
2. How injured by abuse.
3. Training of eyesight.

The Ear :

1. Importance and situation.
2. How injured by abuse.
3. Care of ears.

Smell and Taste:

1. Uses of these senses.
2. Care of these senses.

Illustrations from chart.

WRITING—Slates of proper size ruled with slate rulers; pencils long and well sharpened; correct position of body, feet and arms, with pencil pointing over right shoulder, and wrist from the desk.

First two weeks—Thorough drill upon simple exercises to secure freedom of motion and control of the pencil.

Make the letters i, u, w, m, n, v, o, e, c, a, x, two spaces high, and r, s, two and one-half spaces high in first practice. Complete alphabet of small letters by the close of twelfth week. Begin writing words as soon as enough letters have been learned to make a word. Do not allow children to write words in which

there are letters that have not been given in a writing lesson. Teach such capitals as are necessary for the work.

Use counting exercises when they are helpful.

Allow no careless work at any time.

MUSIC—Pupils shall be taught to sing songs by rote, choosing for such songs those of high rather than low pitch, also songs that the little ones can understand and appreciate, songs that will appeal to their childish imaginations so that they will be singing in the fullest sense of the term. Rote singing is a very important part of a course of music. As every child learns his mother tongue by rote, so the child must be taught to sing before he can read music. With an earnest, conscientious teacher this can soon be accomplished. It is astonishing, if proper attention is paid to this part of the child's musical training, how much can be done in a short time. They shall be taught to sing the scale, ascending and descending, at a convenient pitch by the scale names, one, two, three, four, five, six, seven and eight, represented by the numerals, 1, 2, 3, 4, 5, 6, 7, 8; also to sing the same by the syllables, do, re, mi, fa, sol, la, si and do. The pitch names or letters are not to be taught at this stage in this grade.

Pupils are to practice from the numerals at the bottom of Chart No. 1, being made to understand that a comma after a figure means to sing a short sound, and a dash means to sing a long sound.

For dictation, use the scale names; for singing,

use the syllables.

DRAWING—In connection with the study of the type forms as prescribed in detailed course of study, terms of Location, Direction and Position should be learned.

Teach expression of form in three ways: By Making, by Drawing, and by Language.

No drawing or pencil holding as an exercise *in itself* should be required for the first ten weeks, but tracing on models in the air and on desks, and work at the blackboard should be practiced in order to deepen the impression of form.

Tablets may be used when the faces of models are studied, or about the eighth week of school.

The twelfth and sixteenth weeks should be spent in reviews, thereby strengthening the pupils in the main features of the work.

Specimens of pupils' work should be collected by the close of each term. This should consist of clay modeling; paper folding of squares and of strips to form hollow cylinders and cubes, pasting tablets for borders, for objects and for views of models; stick laying for borders and objects; and drawing on paper. All of this work will be found to be carefully prescribed in the Manual, "Use of Models," and detailed course of study.

A CLASS—First Grade.

LANGUAGE—Daily work in copying sentences from blackboard.

Daily work in writing short sentences from dictation.

Teach the use of the capital at the beginning of a sentence. also the use of the period and the interrogation point at the end of a sentence.

Daily lessons in oral language, lead the child to express himself in complete statements in these lessons, also give special attention to his oral expression in all lessons.

Material for oral language:

1. Geography—see detailed course.
2. Form—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Begin the writing of short original statements in connection with this oral work.

Have children reproduce the fables and historical stories after they have become familiar with the thought.

Select poems. have children learn them, also tell them in their own language.

See detailed course in Language.

READING—

Appleton's Chart, completed.

Appleton's First Reader. Part I., completed.

Barnes' First Reader, Part I., completed.

Supplemental work :

Harper's First Reader. Part I., completed.

Normal Course First Reader. pp. 26-75.

Blackboard lessons.

See detailed course in reading.

SPELLING—Grade Vocabulary—all new words in reading lessons as outlined in detailed course.

Pupils should write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words in grade vocabulary.

NUMBERS—Review B First course. Teach 7 to 10 inclusive, all combinations.

Figures to 10 inclusive. Roman notation to 10 inclusive. and sign ×, =, ×, —, and ÷.

Fractions—$\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{10}$.

Compound Numbers.—Linear foot, square foot and cubic inch.

10 cents = 1 dime, 10 dimes = one dollar.

5 nickles = 1 quarter, 4 quarters = 1 dollar.

2 half dollars = 1 dollar, also 7 days = 1 week.

4 weeks = 1 month; and 4 quarts = 1 gallon

Measure by inches to 10 inches, by feet to 10 feet, by square inches to 10 square inches.

Buying, selling and making change.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY—Simple limb movement as given in the preceding class. Additional movements for trunk and limbs. Sitting and standing positions.

See detailed course.

The Lungs :

1. Difference between inspired and expired air.
2. How the air is prepared for the lungs in its passage through the nostrils. Bad effects of breathing with mouth open.

The Skin :

1. Structure and use of covering.
2. Perspiratory glands, their use, effect if these glands are closed.
3. Bathing and care of skin.

Illustrations from chart.

WRITING—Perfect position at desk whenever any writing is done. Slate always in position with pencil pointing over the right shoulder.

First two weeks thorough drill upon simple exercises with counting. Count fast enough to secure a good easy writing motion.

Review small alphabet first six weeks.

Begin work upon capitals third week.

Write words and sentences beginning with capitals.

Allow no capitals used, in any work, different from those given in the writing lesson.

Use blackboard freely. Teachers should never allow themselves to do any careless work upon the boards at any time.

MUSIC—Scales and interval drill.

In addition to the requirements of the preceding term, the pupils now commence Chart No. 2, singing the figured exercises as directed to through page 4, inclusive, when they shall be taught musical notation to the extent indicated in the first four exercises in Chart No. 5.

Go on in daily practice from the Charts to the bottom of Chart No. 7. Other songs at the discretion of the teacher.

Scale and interval practice.

DRAWING.—The work in this grade should be done upon blackboard and paper.

Require all drawing to be made of lines of definite lengths. Longest lines on paper should not be less than four inches.

Special drill on pencil holding and movement. Seek for freedom of expression.

Lead pupils to find their own errors.

In paper folding have some definite aim.

The summary of the term's work should consist of specimens of work done by pupils in clay modeling

paper folding of squares and strips to form hollow tubes, and square and triangular prisms; pasting tablets for borders, for rosettes, to represent objects and for views of models; stick laying to represent objects and for borders; and drawing on paper.

This work is carefully prescribed in Manual, "Use of Models." and in the detailed course of study.

B CLASS—Second Grade.

LANGUAGE—Daily work in copying sentences. Daily work in writing sentences from dictation.

Teach use of period and interrogation point at end of sentence.

Teach use of capital letter at beginning of sentence, also in writing names of persons.

Daily lessons in oral language, giving special attention to correct and complete statements.

Material for oral language:

1. Form—see detailed course.
2. Geography—see detailed course.
3. Stories from history.
4. Myths and fables.
5. Poems.
6. Picture lessons.
7. Elementary work.

Daily work in the writing of short, original statements in combination with this oral work and the work in reading.

Have children reproduce orally the fables and historical stories.

Poems should be carefully selected, children should learn their meaning and then commit them to memory

Special attention to language used by pupils in all recitations.

See detailed course in Language.

READING—

Appleton's First Reader, Part II.
Barnes' First Reader, Part II,
Appleton's Second Reader. 10 lessons.
Barnes' Second Reader, 10 lessons.

Supplemental work:

Harper's First Reader, Part II.
Normal Course First Reader, completed

See detailed course in reading.

SPELLING—Vocabulary—All new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analysed words in vocabulary, also analyze new words composed of familiar sounds.

NUMBERS—Number work, 11 to 18 inclusive, all combinations. Review first grade work.

Notations—Figures and Roman notations to 18 in clusive. Develop idea of tens and units.

Fractions—$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$ and $\frac{1}{10}$.

Compound Numbers—Peck, yard, square yard and cubic inch.

12 inches = 1 foot.
3 feet = 1 yard.
12 things = 1 dozen.
12 months = 1 year.
9 square feet = 1 square yard.

Measure:

By inches to 16 inches.
By feet to 16 feet.
By yards to 16 yards.
By square inches to 16 square inches.
By square feet to 16 square feet.

PHYSICAL CULTURE AND PHYSIOLOGY—Finger, elbow, shoulder and whole arm movements; also toe-standing and heel-elevation.

Correct standing and sitting positions, also carriage of the body in walking.

Breathing exercises. Caution against voluntary movements of shoulders or body during inspiration.

See detailed course.

Bones and Muscles:

1. Structures and uses of each.
2. Development of of muscles; effect of exercise upon the same.
3. Growth of the bones.

Illustrations from chart.

WRITING—Perfect positions. Correct pencil holding. Show the exact position of hand, fingers and pen-

cil and insist upon every one doing this part of the work.

Practice book No. 1; lead pencils.

First two weeks of term use simple drill exercises, giving more attention to position and pencil holding and free movement than to the exact forms of letters. Do not allow any careless work at any time. Use blackboard freely. Send a portion of the class to the board each day. Criticize the work on board. Ask pupils to criticize one another's work. Review small and capital letters in words and sentences.

Write specimens at beginning of each month, keeping first one written to compare with last. Send others home.

MUSIC—Interval practice continued. Review the requirements of the preceding classes, and in addition to same proceed to the bottom of Chart No. 13.

Interval practice continued.

Exercise pupils daily in practice upon the ladder and with manual signs in key C or D. Teach the pitch names.

A few more simple varieties of two, three, four and six part measure. Exercise from the staff to illustrate what is known of time and tune. Rote songs at the discretion of the teacher.

DRAWING—Teach expression of form of Making, by drawing and by Language, as in First Grade.

Teach by comparison. Special drill for pencil holding and free movement.

Lines of definite lengths.

Drawings large, both at blackboard and on paper.

Appearances and face views carefully expressed.

Special attention to the description of mental images of solids.

Lead pupils to detect their own errors.

Teach proportion.

The summary of the term's work should consist of specimens from each pupil in clay modeling. paper folding of squares and strips to form hollow models, pasting tablets for borders, for rosettes for objects, and for views of models, stick laying for borders and for objects, and drawing on paper.

The detailed course of study with the Manual, "Use of Models," prescribes the daily lessons for this grade.

A CLASS—Second Grade.

LANGUAGE—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the comma before and after the name of a person addressed.

Teach the use of the capital in writing the names of the months and the days of the week; also in writing the pronoun I.

Daily lessons in oral language; aim for accurate and complete statements.

Material for oral language:

1. Form—see detailed course.

2. Geography---see detailed course.
3. History stories.
4. Fables and myths.
5. Poems.
6. Picture lessons.
7. Elementary Physiology.

Daily work in writing of original statements, in connection with oral language and reading lessons.

Daily work in the oral reproduction of the thought of the reading lessons.

Poems carefully selected, thoroughly studied and then committed to memory.

Careful attention to language used by pupils in all recitations.

See detailed course in Language.

READING

Appleton's Second Reader, Lessons XI. to XXXVI.

Barnes' Second Reader, Lessons XI. to XXXVI.

Supplemental work:

Harper's Second Reader, Part I.

Normal Course Second Reader, 72 pages.

See detailed course in reading.

SPELLING--Vocabulary—all new words in reading work as outlined in detailed course.

Write correctly from dictation all words in grade vocabulary.

Spell by sound all analyzed words; also analyze

new words composed of familiar sounds.

NUMBER---Number work, 18 to 30 inclusive. special attention to multiples.

Notation - Read and write numbers to 100; Roman notation to 35.

Fractions - $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$, $\frac{1}{10}$.

Compound Numbers---Bushel, ounce, pound, cubic inch; also 16 ounces = 1 pound, and 4 pecks = 1 bushel.

Areas of squares and oblongs and fractional parts of the same, areas not to exceed 20 sq. in.. sq. ft. or sq. yds.

Measure perimeters of these square and oblong surfaces.

Processes - Addition of any two numbers whose sum is less than 100.

Subtraction, with reduction minuends less than 100.

Multiplication, products less than 100 and multplier 2.

Short division, with reduction, dividend not to exceed 100 and divisor 2.

PHYSICAL CULTURE AND PHYSIOLOGY---Same exercises as for B class; also arm-raising sideways and overhead. Walking exercises; "tip-toeing" should not be allowed; careful attention to carriage of body in walking.

See detailed course.

The Food:

1. Use of food.
2. Kind of food animal, vegetable and mineral.

3. Kind of food used in cold, hot and temperate climates.
4. The stomach—illustrations from chart.

The Nails and Hair.

I. Care of these.

WRITING—Practice book No. 1; lead pencils.

Blackboard work and specimens same as Class B.

First two weeks of term use drill exercises; do but little work upon letters. Get everbody ready for work. Review both alphabets in words and sentences. We are now getting ready for pens and ink, and very careful attention should be given to *position*, *pencil holding* and freedom of movement.

Allow no careless work at any time.

MUSIC—Review the work of the preceding classes, then proceed on chart to bottom of No. 16.

Exercise daily upon the sounds of the scale with the Manual signs and ladder.

Songs by rote at the discretion of the teacher.

On transfer to the next higher class, the teacher should be able to report the number of pupils who can sing the scale and those who cannot, also the number who can sing alone one song from the New First Music Chart.

DRAWING—The work of this class embraces the same general features as that of Class B.

The type forms include the cone, square, pyramid, vase form and a review of the nine models already studied.

All drawings on board and paper large and bold.

Special drill for pencil holding and free movement, with tracing in air and on board and paper.

Special attention to clay modeling, paper folding, stick laying, mounting surface forms, and drawing on paper, as directed in detailed course and "Use of Models."

B. CLASS.—Third Grade.

LANGUAGE—Daily work in copying sentences containing the new words of the spelling lesson: also in writing these sentences from dictation.

Teach the abbreviations, Mr., Mrs. and St.

Teach the children to write their own addresses; also the day of the week and its date.

Teach the use of *is* and *are;* also *was* and *were.*

How to write initials.

Material for oral language and written composition:

1. Form.
2. Geography—see detailed course.
3. History stories.
4. Reading lessons.
5. Poems.
6. Picture lessons.
7. Physiology.

Daily work in writing original statements and arranging the same in logical order. Develop carefully the thought of the reading lesson; have children express this thought orally in their own language, then write it in the form of a simple composition.

Carefully selected poems studied and then committed to memory.

Careful attention to language used by pupils in all recitations ; errors should be persistently corrected

See detailed course in language.

READING.—

Appleton's Second Reader, completed.

Barnes's Second Reader, completed.

Supplemental Work :

Harper's Second Reader, Part II.

Normal Course Second Reader, completed

Wayside and Seaside, No. 1, completed.

See detailed course in reading.

SPELLING—Vocabulary—see spelling manual for this grade.

Define, spell orally and write in sentences from dictation all words in grade vocabulary. See detailed course in reading.

NUMBERS—Number work 30 to 60 inclusive, special attention to multiples.

Notation---Read and write numbers to 1,000 ; Roman notation to 30.

Fractions---$\frac{1}{2}$, and a review of all previous work. Reduction of mixed numbers to fractions ; use no fraction whose denominator is larger than 12.

Compound numbers--60 minutes = 1 hour, 24 hours = 1 day, 365 days = 1 year ; also the number of days in each month of the year.

How to write dollars and cents, and the use of dol-

lars and cents together in applied problems.

Teach linear rod.

Processes---Addition of two or three numbers larger than 100 whose sum is less than 1,000. Column addition of three figures.

Multiplication of numbers of one period, using 2, 3, 4, 5 and 6 as multipliers.

Subtraction with reduction, using numbers of one period only.

Short division with reduction, using 2, 3, 4, 5, and 6 as divisors.

Make statements for problems.

See detailed course.

GEOGRAPHY---Structure---Relief of school district.

Place---Semi-cardinal points. Maps of school room, floor and school yard, to scale.

Climate--

(*a.*) Moisture:

1. Evaporation.
2. Productions—Clouds, mist, fogs, rain, etc.

(*b*) Heat—observe daily temperature;

Position of sun.

1. During different parts of day.
2. During different parts of year.

Vegetation—Soil, fertile and barren.

Uses of plants.

Trees of vicinity.

Animals—Special study of camel and bears.

Minerals—Special study of chalk and graphite.

People—Elementary lessons on races represented in community.

Modes of life—Occupation; ideas of city, town and state.

Government—Lead children to knowledge of that which they can comprehend about city government.

See detailed course in elementary geography.

PHYSICAL CULTURE AND PHYSIOLOGY—Review work of Second Grade. Teach arm raising, with respiration combined; also slight knee bending, toe raising, head and body bending.

See detailed course.

The teeth:

1. Structure.
2. How injured.
3. Care of.

The Lungs:

1. Structure.
2. Care of.
3. Effect of exercise upon these organs.

Illustrations from chart.

WRITING—Practice Book No. 1; pen and ink.

First two weeks of the term use drill exercises. Watch carefully the pen holding, Show all how to take ink. Have them take up pens and lay them down often in order to get them accustomed to the new instrument.

Blackboard work and specimens same as Second

Grade. Review both alphabets in words and sentences.

Spelling lessons and all writing previously done with lead pencil to be done with pen and ink.

MUSIC—Review the works of the preceding classes. Begin the work on Chart 1, second series.

Rote songs at the discretion of the teacher.

Pupils to be taught the Middle, Upper and Lower scales, to name the fifteen different pitches, and tell readily the position of each pitch upon the staff.

Daily exercises upon the scale with the Manual signs and ladder.

The teacher is to ascertain the compass of the voice of each pupil.

(*a.*) The number who can sing alone the scale in the key of C.

(*b.*) The number who can sing easily as high as twice marked e and no higher.

(*c*) The number who can sing easily as high as twice marked g.

(*d.*) The number who can sing to small a in the lower scale.

(*e.*) The number who can sing to small g in the lower scale.

Songs and exercises at the discretion of the teacher.

Select songs that will illustrate what the pupils have learned in time and tune.

DRAWING—No. I Drawing Book for pupils, with Manual, Part I., for teacher's use.

Special study of natural leaves, fruits and vegetables, and the drawing and modeling of the same.

Much supplementary work in bold and free drawing.

Books should show a careful record of term's instruction and a free expression characterized by broad gray lines.

A CLASS—Third Grade.

LANGUAGE—Daily work in copying sentences containing the new words; also in writing these sentences from dictation.

Teach the use of the period as a mark of abbreviation, A. M., P. M., Av., P. O., cts., doz.

Teach the use of capital letters in writing names of cities and streets.

How to write dates.

Simple use of quotation marks.

Simple form for letter.

Common contractions, it's, can't, don't, etc.

Form of the possessive case of singular nouns in which the apostrophe precedes the *s*.

Careful attention to language used by pupils in all recitations.

Daily work in oral and written composition: Have pupils reproduce orally the thought of the geography and reading lessons: also write the same in the form of a simple composition.

Work for complete statements and the logical arrangement of the same in this composition work.

Carefully selected poems studied and then committed to memory.

See detailed course in Language.

READING—

Appleton's Third Reader, 25 lessons.
Barnes' Third Reader, 25 lessons.

Supplemental work:

Cats and Dogs, completed.
Fables and Folk Stories, completed.
Normal Course Third Reader, begun.

See detailed course in reading.

SPELLING—Vocabulary—See spelling manual for this grade.

Define, spell orally and write in sentences from dictation all words in grade vocabulary. See detailed course in reading.

Spell new words which occur in geography and number.

NUMBERS—Numbers work, 60 to 100 inclusive; special attention to multiples.

Notation—Read and write numbers of two periods; Roman notation through to 100.

Fractions—Continue work of preceding grades.

Teach reduction of improper fractions to whole or mixed numbers; use no fraction whose denominator is larger than 12.

Teach objectively addition, subtraction, multiplica-

tion and division of halves, thirds and fourths.

Compound Numbers—Dollars and cents used together in applied problems.

Teach cubic foot and linear mile.

Percentage—100%, 50% and 10% taught objectively; use both fractional and decimal forms.

Processes—Addition of two or more numbers of two periods each; column addition of four figures.

Subtraction with reduction, using numbers of two periods.

Multiplication, multiplier containing two figures.

Short division completed.

Make statements for problems.

See detailed course.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY—Structure—Forms of land and water—island, continent, peninsula, isthmus; cape, lake, ocean, sea, gulf, bay, strait, harbor, plain. hill, valley, mountain, river-basin, river, spring, creek.

Detroit—Map of city showing principal features.

Wayne County—Map to scale showing townships: learn townships bordering on Detroit.

State of Michigan—Parts, boundaries, surface, drainage, coastline, climate, vegetation, occupations of people, cities and railroads.

See detailed course.

PHYSICAL CULTUEE AND PHYSIOLOGY—In addition

to exercises for B Class, teach stepping exercise, alternate heel and toe raising, military salute and facings.

See detailed course.

The teeth and Food:

1: Structure of teeth.
2. Kind of teeth—incisor, canine and molar. Lead children to discover that human body needs for its sustenance certain properties of various classes of food substances.
3. Importance of mastication.
4. Difference in structure of teeth of herbivorous, carnivorous and rodent animals.

Illustrations from chart.

WRITING – Practice-book No. 1; pen and ink; copy-book No. 1.

First two weeks of term use drill exercise. Watch carefully all work done with pen. Do not require too much miscellaneous writing. Avoid working too slowly in practice books or too rapidly when doing other work, as writing spelling lessons. Write upper half of each page through copy-book by close of tenth week. Complete book nineteenth week.

Specimens at beginning of each month.

MUSIC - In addition to the work of the preceding term, keys of C. G, D and E studied. Let the work be a developing process, and keep close relationship between lessons, each being a step in advance of the last.

Begin two part singing. The time should always be beaten steadily and the pupils know with which beat the commencing note of each phase or section is to be sung.

DRAWING--No. 2 Drawing Book for pupils and Manual Part I, for teacher's use.

Special attention to views and appearances of models, pattern making and drawing of natural forms. Careful attention to pencil holding and movement.

Drawings large and, free.

Much supplementary work on blackboard and paper should be required.

B CLASS—Fourth Grade.

LANGUAGE—Hyde's Practical Lessons in English, lessons I to XXV inclusive.

Simple use of quotation marks.

Simple form for a letter.

Possessive forms of plural nouns ending in *s*.

Daily work in writing from dictation sentences containing the new words in spelling.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

Daily work in written composition; have pupils reproduce the thought of the geography, history and reading lessons.

Special attention to the logical arrangement of the sentences in this composition work.

See detailed course in Language.

READING—

Appleton's Third Reader, lessons XXVI. to LI.
Barnes' Third Reader, lessons XXVI to XLI.
Seven Little Sisters, completed.

Supplemental work:

Our World Reader No. I, pp. 1-35.
Book of Tales, completed.
Normal Course Third Reader.

SPELLING—See spelling manual for this grade.

Define, spell orally and write from dictation all words in grade vocabulary,

Special attention to the spelling of new words which occur in geography, number or drawing lessons.

NUMBERS—Number work—Review all work in multiples and complete to 144. Daily work in oral applied problems.

Notation—Read and write numbers through units of millions.

Fractions—Develop terms numerator and denominator.

Teach objectively addition, subtraction, multiplication and divisions of halves, thirds and fourths and give written figure work for the same.

Compound Numbers.—Complete liquid measure. Teach cubic yard, also square rod. Review work of all preceding grades in compound numbers.

Percentage—20%, 25%, and 75%. Use both fractional and decimal forms.

Processes—Continue addition and subtraction.

Multiplication, multiplier containing three figures and multiplicand containing not more than three figures.

Long division, divisors not to exceed 30.

Statements for problems.

See detailed course.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY—

Earth as whole:

1. Form.
2. Dimensions.
3. Measurements.
4. Daily and yearly motions.
5. Distribution of heat.
6. Winds.
7. Seasons.
8. Surface.

North America:

1. Location and boundaries,
2. Structure.
3. Drainage.
4. Outline.

See detailed course in geograpy for Fourth Grade.

PHYSICAL CULTURE AND PHYSIOLOGY—Special attention to position of body in sitting, standing and walking.

Review work of Third Grade and introduce varied shoulder movements, leg, trunk and head exercises.

Walking and marching exercises as given in detailed course.

The Blood:

1. The use of blood in conveying nourishment to the tissues.
2. Differences in color of pure and impure blood.
3. Effects of exercise and respiration upon the blood.
4. Treatment of injuries to the blood vessels.

Illustrations from charts.

WRITING—Practice-book No. 2. Copy-book No. 2.

First two weeks of term use drill exercise. Write upper half of each page, through copy-book by close of 10th week. Complete book by close of 19th week. Mark each page of copy-book when the page is finished. Write three pages in practice-book to one in copy.book.

Specimens at beginning of each month.

MUSIC—Review the work of the preceding classes. Try to select exercises and songs to illustrate previous drill in tune and time.

Test exercises, page 165, New Second Music Reader, Nos. 1 to 13, boys and girls should alternate in reading and singing the exercises; afterwards individual pupils should be called upon to sing them.

DRAWING--No. 3 Drawing Book for Pupils, Prang's Complete Course Manual, Part II, for teacher's use.

Drill exercises in pencil holding and movement.

Continued attention to views and appearances.

Grouping of objects and drawing.

Units of designs carefully explained

Historic ornaments Memory exercise.

Paper cutting and pasting of decorative forms.

A CLASS—Fourth Grade.

LANGUAGE Hyde's Practical Lessons in English, No. I, Part I, completed.

Review work of preceding grade.

Possessive form, singular and plural nouns. Avoid special difficulties.

Daily work in writing from dictation sentences containing new words in the spelling lesson.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

Daily work in written composition; have pupils reproduce the thought of the history, reading and geography lessons.

Special attention to the logical arrangement of the sentences in this composition work.

In connection with the reading in history learn Longfellow's Paul Revere's Ride. Copy it, noticing that it is divided into stanzas and that the first word of every line begins with a capital. Have pupils reproduce the thought of this poem in their own language in the form of a composition.

See detailed course in Language.

READING—

Appleton's Third Reader, completed.

Barnes' Third Reader, completed.
Stories of American History, completed.

Supplemental work:

Our World Reader No. 1, pp. 205-254.
Scribner's Geographical Reader, North America.
Ten Boys on the Road From Long Ago.

SPELLING—Vocabulary—see spelling manual for this grade.

Spell and define all words in grade vocabulary.

Special attention to the spelling of geographical terms, also other new words as they occur in any lesson.

NUMBERS—Review multiple work. Daily oral work in applied problems.

Notation—Read and write numbers of three periods.

Fractions—Addition, subtraction, multiplication and division of all fractions through twelfths and written figure work for the same.

Compound Numbers—Avoirdupois weight completed.

Teach reduction of compound numbers to a higher or lower denomination, and use all compound numbers taught in preceding grades in problems involving *one* reduction.

Percentage---$16\frac{2}{3}\%$, $33\frac{1}{3}\%$ and $12\frac{1}{2}\%$. Use all rates previously taught.

Interest—Simple interest, 6% time expressed in years.

Processes—Addition, subtraction and multiplication continued.

Long division continued, divisors containing not more than three figures.

Teach simple form of bill.

Make statements for problems.

Selections from Robinson's Beginner's Book and Sheldon's Elementary Arithmetic.

GEOGRAPHY---Review B Fourth work.

North America:

1. Structure.
2. Drainage.
3. Outline.
4. Climate
5. Distribution of Vegetation.
6. Distribution of Animals.
7. Distribution of Minerals.
8. People.
9. Political Division.

PHYSICAL CULTURE AND PHYSIOLOGY—Exercise same as for B. Class. Have pupils move with promptness and precision during exercises.

The Skin :

1. Structure and uses.
2. Uses of perspiration ; effects if prespira tory glands are closed.
3. Effects of exercise upon the skin.
4. Hair and nails.

5. Bathing and care of skin.

The clothing:

1. Value of clothing; woolen.
2. Cleanliness and need of frequent changing.
3. Effects of tight clothing.

Illustrations from chart.

WRITING—Practice book No. 2; Copy-book No. 2 B.

First two weeks of term drill exercises. Write upper half of each page through copy-book by close of 10th week. Complete book by close of 19th week.

Copy-book through page 10 by close of 10th week.

Complete copy-book by close of 19th week.

Mark each page of copy-book when the page is finished.

Write three pages in practice book to one in copy book.

Specimens at beginning of each month.

MUSIC—In addition to the work of the preceding term, the division of the beat introduced. Class should practice all major scales. They should be able to sing chromatic scales.

DRAWING (Same as B Class, Fourth Grade.)

B CLASS—Fifth Grade.

LANGUAGE—Hyde's Practical Lessons in English. No. 1.. Part II., Lessons I. to XXV., inclusive. Review Part I.

Work in letter writing continued.

Have pupils write the poem on page 80 from dictation, giving special attention to punctuation. Give other work of similar nature.

Careful attention to language used by pupils in all recitations ; correct all mistakes.

Daily work in written reproduction of the thought of the reading, geography and history lessons.

In this written composition work pay special attention to paragraphing.

READING—

Scribner's Geographical Reader—South America.

Our World Reader, No. 1—South America.

Familiar Animals and Their Wild Kindred, completed.

Hawthorne's Wonder Book, Part I.

Study of Hawthorne's Life.

SPELLING—Careful attention to the spelling and meaning of new words in all lessons.

Reed's Word Lessons, lessons 1 to 52 inclusive. Special attention to the work in phonics and the diacritical markings of the letters, as given in these lessons.

ARITHMETIC--Notation and numeration of numbers through three periods.

Addition, subtraction, multiplication and division with common proofs and names for terms.

Fractions—Review all previous work.

Teach reduction to a common denominator, obtain common denominator by inspection.

Give abundant exercise in addition, subtraction, multiplication and division of fractions having both like and unlike denominations through twentieths.

Compound Numbers—Review tables of denominate numbers previously taught and use these compound numbers in applied problems. Teach reduction descending and ascending, no problem to contain more than three denominations,

Decimals—Addition, subtraction, multiplication and division of decimals.

Give only simple problems. In division of decimals place the quotient above the dividend and make the divisior a whole number.

Percentage—Use rates already given in applied problems in first case.

Interest—Simple interest, time expressed in years.

Simple form of bill.

Make statements for problems.

Wentworth's Grammar School Arithmetic, pp. 1 to 75, inclusive.

GEOGRAPHY—South America and review. See detailed course for this grade.

United States:

1. Location and boundaries.
2. Extent.
3. Advantages.
4. Population.

5. Education.
6. Religion.
7. Government.
8. History.

PHYSICAL CULTURE AND PHYSIOLOGY—Exercises in deep breathing; effects on the body and practical uses of deep breathing.

Teach combined movements of the body and the arms. Knee bending and all elementary exercises of Fourth Grade in review.

See detailed course.

Exercise:

1. Benefits and effects of.
2. Value of out-door sports.

The Heart:

1. Functions,
2. Veins, arteries and capillaries.

Illustrations from chart.

WRITING—Practice-book No. 2. Copy-book No. 3.

First two weeks of term, movement drill exercises, using muscular movement; be sure that all get the free, easy use of the forearm.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Write three pages in practice-book to one in copy-book.

Mark each page of copy-book when the page is fin ished.

Specimens at the beginning of each month.

Give frequent tests of speed.

MUSIC--Pupils of this grade should understand the signatures of all the major keys. Pupils should be able to write correctly all scales. Test exercises, pages 167, 168, 169. Second Music Reader, beating time, time, names and singing. More varieties of time. Begin drill in steps and half-steps.

DRAWING—No. 4 Drawing-book for pupils, Prang's Complete Course Manual, Part II, for teacher's use.

Careful and continued attention to the three subjects---Construction, Representation and Decoration, with better comprehension of principles and more careful execution.

Special and repeated drill in observing the appearances of retangular objects and the representations of them.

Historic ornaments. Memory exercise.

Study of natural flowers for decorative purposes.

Paper cutting and pasting rosettes.

A CLASS—Fifth Grade.

LANGUAGE—Hyde's Practical Lessons in English, completed and reviewed.

Letter-writing continued, special attention given to the body of the letter.

How to write a receipt for money; also a simple promissory note.

Work in writing poems from dictation continued.

Careful attention to language used by pupils in all recitations; errors should be persistently corrected.

Daily work in written composition. Reproduce the substance of what has been read or taught in the other lessons.

Special attention to paragraphing in written composition work.

READING--

Scribner's Geographical Reader– Europe.
Our World Reader, No. 1—Europe.
Eggleston's First Book in American History—completed.
Hawthorne's Tanglewood Tales.
Study of Hawthorne's Life.

SPELLING—Careful attention to the spelling and meaning of all new words which occur in the regular lessons in other branches.

REED'S WORD LESSONS—Review work of preceding grade and advance to lesson 85; special attention to phonics and diacritical marks.

ARITHMETIC—Greatest Common Measure, Least Common Multiple and Cancellation. Wentworth's Grammar School Arithmetic, pp. 98 to 111. Omit exercise 67 until A Sixth.

Fractions--All operations, denominators not to exceed 144.

Compound Numbers--Continue the work of the preceding grade. Teach thoroughly the subtraction of dates to determine length of time.

Decimals--Finish this subject, omitting all puzzling and difficult examples. Give abundant simple practice. Wentworth's Arithmetic, pp. 76 to 98.

Percentage—Teach each case, using rates already mentioned. Use decimal form.

Interest--Simple interest, time expressed in years and months.

GEOGRAPHY—Europe and review. See detailed course of this grade.

PHYSICAL CULTURE AND PHYSIOLOGY—Exercises same as for B Class. In marching the movements should be made with reference to military precision, thus securing an erect and proud carriage of the body. See detailed course.

Special Senses :

1. Location and use.
2. Care and protection.

The Bones :

1. Structure, composition and use.
2. Names of principal divisions of skeleton. number of bones in each division.
3. Different kinds of joints.

Illustrations from chart.

WRITING—Practice-book No. 2. Copy-book No. 4.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week. Complete copy-book by close of nineteenth week.

Mark each page of copy-book when page is completed.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC—Same as Class B. Also the class should be able to sing any piece in the Second Reader.

DRAWING—No. 5 Drawing Book for Pupils. Prang's Complete Course Manual. Part II, for teacher's use.

More careful execution, better understanding of principles required.

Views and appearances carefully understood.

Units of design for decorative purposes thoroughly considered.

Study of natural flowers for units of design.

Cutting and pasting of rosettes, on p. 18.

Historic ornaments. Memory exercise.

B CLASS—Sixth Grade.

LANGUAGE—Kinds of sentences and rules for the punctuation of each kind. Parts of sentences subject and predicate. Analysis of short, simple sentences.

Forms of names, how to write them; also how to abbreviate them.

Letter-writing continued. How to write a receipt for money; also a promissory note. Teach form and meaning of a check.

Use Reed and Kellogg's One Book Course in English, lessons 1 to 18 inclusive, in connection with topics studied.

Careful attention to language used by pupils in all recitations.

For Composition Work have pupils reproduce in writing the substance of the lessons in Geography, History and Reading. Special attention to paragraphing.

The language period for at least two days in the week should be devoted to work in composition.

READING—

Scribner's Geographical Reader---Asia.

Our World Reader, No. 1---Asia.

Living Creatures of Water, Land and Air---completed.

Hiawatha. Study of Longfellow's Life.

SPELLING---Careful attention to spelling and meaning of new words in all lessons.

Use dictionaries, and teach pupils to find meaning and pronunciation of words.

Reed's Word Lessons, lessons 85 to 116 inclusive

ARITHMETIC—Common Fractions.

Review carefully all previous work and finish the subject of Common Fractions. Wentworth's Grammar School Arithmetic, pp. 111 to 147.

Compound Numbers—Review the tables of denominate Numbers, also reduction, ascending and descending, and use these in applied problems involving two reductions.

Decimals—Thorough review of work of preceding grade.

Percentage—Finish percentage (without its varied applications), thorough drill in applied problems, use all four cases. Use decimal form for rates.

Interest—Simple interest, time expressed in years, months and days. Simple problems.

GEOGRAPHY—Asia and review. See detailed course for this grade.

PHYSICAL CULTURE AND PHYSIOLOGY—Exercises as given in detailed course. Aim at quality rather than quantity in the regular daily drill. Caution pupils before beginning exercises against errors in the executions of the movements. Jerking and unnecessary twisting of the body should be avoided. Muscles should be under such control that directions will be carried out easily and effectively.

Digestion of food :

1. Appearance of stomach before digestion, also during digestion.
2. Circumstances which affect digestion.
3. Kinds of food and value of a mixed diet.
4. Effects of alcohol on the stomach.
5. Effects of tobacco on the stomach.
6. Waste and repair of the tissues.

Illustrations from chart.

WRITING – Practice book No. 3. Copy-book No. 5.

First two weeks of term, muscular movement exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC—This class should begin third series of charts. They should be taught to know the intervals to the extent of major and minor seconds and thirds, perfect and augmented fourths and perfect and diminished fifths. Difficult modulation. Gradually introduce all varieties of time.

DRAWING—(Same as A Class, Fifth Grade.)

A CLASS—Sixth Grade.

LANGUAGE—Agreement of subject noun and predicate verb.

Teach common proof-marks; use these in indicating corrections in pupil's work.

Nouns and verbs having like pronunciation distinguished.

Modified subjects and analysis of simple sentences containing modified subjects.

Definition, comparison, choice and arrangements of adjectives.

Modified predicate and analysis of simple sentences containing modified predicates.

Definition, comparison and the use of adverbs.

Review parts of speech.

Use Reed and Kellogg's One Book Course in English, Lessons 19 to 36, inclusive, in connection with topics studied. Review B, sixth work.

Have the pupils reproduce in writing the substance of the geography, history and reading lessons. Develop a whole chapter or topic in one composition.

The language period for at least two days in the week should be devoted to composition work.

READING—

Scribner's Geographical Reader—Africa and Australia.
Our World Reader No. 1—Africa and Australia.
Tompkin's Life of Franklin.
Foster's Life of Abraham Lincoln.
Courtship of Miles Standish.
Study of Longfellow's Life.

SPELLING—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries and learn to find pronunciation and meaning of words.

Reed's Word Lessons, lessons 117-148 inclusive.

ARITHMETIC—Compound Fractions--Review and make a wide and varied application of fractions to practical business problems. Wentworth's Arithmetic, pp. 147 to 155. Selections from other authors.

Compound Numbers—All operations. Wentworth's Arithmetic, pp. 155 to 171. Carpentering, papering and plastering.

Decimals—Review. drill thoroughly on the figure work after the reasons are clearly understood.

Percentage—Application to Profit and Loss. Use great variety of simple problems.

Interest—Simple interest, time in years, months and days.

GEOGRAPHY—Africa, Australia and Oceanica.

See detailed course for this grade. Review.

PHYSICAL CULTURE AND PHYSIOLOGY—Continue movements of arms and feet. Body twisting and arm stretching. Review elementary exercises, aiming at promptness and grace in execution.

See detailed course.

The Brain:

1. Situation, structure and use.
2. The nervous system; likened to a telegraphic system of communication. The brain, the central office, from which radiate the lines or nerves that carry messages to and from all parts of the body, thus directing all movements of the muscles.

Illustrations from chart.

WRITING—Practice-book No. 3. Copy-book No. 6.

First two weeks of term, muscular movements drill exercises.

Write upper half of each page of copy-book by close of tenth week.

Complete copy-book by close of nineteenth week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC—A, E, B, minor scales, Chromatic scale. Practice singing accidentals.

DRAWINGS—No. 6 Drawing Books for Pupils. Preliminary Manual for teacher's use.

Broader scope of work; better understanding of principles and their application; better execution and more independent work from pupils.

Views and appearances of rectangular objects at different angles.

Special attention to appearances. Thorough instruction and careful study must be given.

Historic ornaments. Memory exercise.

Decorative design. Borders.

Working drawings, figured.

B CLASS—Seventh Grade.

LANGUAGE—Phrase modifiers, analysis of simple sentences containing phrase modifiers. Arrangement and punctuation of phrase.

Compound subject and compound predicate; connection, punctuation and agreement.

Use of preposition, conjunction and interjection.

Special work in business forms and business correspondence.

Use Reed and Kellogg's One Book Course in English. Lessons pp. 37 to 47 inclusive, in connection with topics studied. Daily reproduction of substance of Geography, History and Reading Lessons.

The language period for at least two days in the week should be devoted to work in composition.

Special attention to paragraphing and logical development of thought in compositions.

READING—

Kellogg's First Book in Physiology and Hygiene. Birds and Bees and Sharp Eyes—Jno. Burroughs. Snow Bound and Among the Hills—Whittier. Study Whittier's Life.

SPELLING—Careful attention to spelling and meaning of new words in all lessons. Have pupils use dictionaries. Reed's Word Lessons, lessons 149 to 180 inclusive.

ARIHTMETIC—Common Fractions—Thorough review of the entire subject.

Compound Numbers—Wentworth's Arithmetic, pp. 171 to 203. Connect the study of Longitude and Time with the review of Mathematical Geography.

Decimal Fractions—Review.

Percentage--Review profit and Loss. Teach Commission and Brokerage, Insurance, Taxes and Duties. Wentworth's Arithmetic, pp. 203 to 225. Use simple problems.

Interest--Simple Interest, completed. Wentworth's Arithmetic, pp. 225 to 233.

GEOGRAPHY—Earth as a whole—Review.

1. Structure.
2. Drainage.
3. Outline.
4. Climate.
5. Vegetation.
6. Animals.
7. Minerals.
8. People.

See detailed course.

PHYSICAL CULTURE AND PHYSIOLOGY—Exercises of preceding grade in different combinations, facings and salutes. See detailed course. Topic for essay: The Olympian Games.

Read Kellogg's First Book in Physiology and Hygiene. Each lesson in this subject should be preceded by a clear and thorough explanation, and followed by such questions and talks as will insure a full understanding of the subject matter by the pupils.

WRITING—Practice-book No. 3. Copy-book No. 7.

First two weeks of term, muscular movement drill exercises.

Write upper half of each page through copy-book by close of tenth week.

Complete copy-book by close of 19th week.

Mark each page of copy-book when the page is finished.

Write three pages in practice-book to one in copy-book.

Specimens at beginning of each month.

Give frequent tests of speed.

MUSIC—Review Sixth Grade work, and take a little in advance. Pupils shall acquire one additional song in each major key.

DRAWING—No. 7 Drawing Book for Pupils. Preliminary Manual for teacher's use.

Work in both free-hand and instrumental.

Instrumental and free-hand drawing *must* be kept entirely *distinct*.

Constant drill on free curved movement.

Draw table line when appearance of object is given. Blackboard drawing.

Teach and practice carefully, measuring by pencil in space.

No instrumental work except in construction.

Representation *must* be free-hand. Independent work required.

Representation—Appearance of form. Picture drawing.

Effect of position and distance.

Objects must not be moved while drawings are being made. Pupils must keep their same positions and look

persistently in one direction until the exercise is finished.

Pupils *must* understand the principle and methods given in Manual, pages 28 and 29.

Handle cube and square prism above as well as below the eye.

Models must be made for pupils to study from.

Observation of models by the class as a unit, cannot be practiced according to stated conditions with only one model in the hands of the teacher.

Level of the eye, convergence of receding edges, foreshortening of surface when viewed obliquely, must be carefully studied.

Decoration—Study of bi-lateral units adapted to surface designs. Application of units to borders.

Historic ornaments, Greek, Moorish and Gothic styles. Connect some story of history or myth of literature with the drawing.

Teach the derivation of the ornament, and how used.

Pupils should be required once a week to make or cut in any material, as paper, wood, clay or plaster, the geometric forms and objects drawn in these books. Picture making or the study of plant forms may be alternated with cutting and making.

Collections of pupil's work in drawing and made-work should be called for each term.

A CLASS—Seventh Grade.

LANGUAGE—Object and attribute complements,

analysis of simple sentences containing objects and attribute complements.

Nominative and objective forms of pronouns, office of each.

Noun modifiers, possessive and explanatory.

Infinite and principles; avoid difficult constructions.

Business correspondence, notes, checks and receipts.

Notes of invitation, acceptance, regrets, etc.

Use Reed and Kellogg's One Book Course in English, lessons 48 to 60 inclusive, in connection with topics studied. Review previous courses.

Continue work in reproduction of history, geography and reading lessons. Aim for correct and rapid writing, limit the time; allow for this work in reproduction.

Work for logical development and clearness of statement in composition work. Devote at least two language periods each week to composition in writing.

Review the topics as they are completed in the different studies by means of these written compositions.

READING—

A history of the United States and its people--Eggleston.

Grandmother's Story of Bunker Hill and other Poems—Holmes.

Study of Holmes' Life.

Christmas Carol--Dickens.

SPELLING--Careful attention to the spelling and

meaning of new words in all lessons. Have pupils make daily use of dictionaries.

Reed's Word Lesson's, lessons 181 to 212 inclusive.

ARITHMETIC—Practical problems involving a review of Common and Decimal Fractions and Compound Numbers.

Trade Discount—Explain clearly the nature and purpose of Commercial Discount. Give abundant exercise in great variety of problems. Wentworth's Arithmetic. pp. 238 to 240. Use other authors.

Review Percentage, Profit and Loss, Commission and Brokerage, and Taxes and Duties.

Interest—Teach Compound Interest, and review Simple Interest. Omit Annual Interest. Wentworth's, pp. 243 to 246.

Simple Proportion—Develop the principals of Simple Proportion. Finish the subject as presented in Wentworth's Arithmetic, pp. 254 to 260.

GEOGRAPHY—Political geography.

See detailed course.

1. Political divisions.
2. Government.
3. Religion.
4. Occupations.
5. Commerce.
6. Special study of Michigan.
7. Review of United States.
8. Special study of Great Britain, Germany,

Russia, France, Turkey, India, China, Japan, Egypt and Brazil.

PHYSICAL CULTURE—Review first series. Teach difference between Swedish and American military facings.

See detailed course.

Topic for essay: The education of the Spartan Youths.

WRITING—Practice-book No. 13.

First two weeks of term, muscular movement drill exercise.

Miscellaneous writing, Notes, Receipts, Orders, Drafts, Checks, Business Letters, etc.

Specimens at the beginning of each month.

Give frequent tests of speed.

MUSIC—Same as Class B.

DRAWING—(Same as B Class, Seventh Grade.)

B CLASS—Eighth Grade.

LANGUAGE—Teach the kinds of sentences; simple, compound and complex; also different kinds of clauses.

Avoid involved constructions. Teach how to combine statements.

Classes of nouns, pronouns, verbs, adjectives, adverbs and conjunctions. Use Reed and Kellogg's One Book Course in English. Lessons 78 to 84 inclusive, in connection with topics studied. Review briefly previous course.

Continue business forms; special attention to form of draft.

Continue work in reproduction of lessons in History, Geography, Reading, etc.

Thought analysis of written compositions, take selections which are read, notice how the thoughts are grouped and arranged into paragraphs, find heads for paragraphs, make a synopsis of the whole composition.

Before writing an original composition construct a framework for the same, learn to develop a theme logically.

About half the language time should be given to this work in composition. Train pupils to express themselves clearly and rapidly in written language.

READING---

Evangeline---Longfellow.

Sketch Book---Irving.

A study of Irving's Life.

Reading of poems commemorating events Revolutionary Periods, connect reading with work in history.

SPELLING---Use dictionaries to find pronunciation and meaning of new words in all lessons.

Reed's Word Lessons, lessons 213 to 238 incldsive.

ARITHMETIC---Bank discount---Teach this subject thoroughly. Wentworth's Arithmetic, pp. 233 to 236. Omit true discount. Partial Payments is of less importance, and less time may be devoted to this subject.

Trade Discount—Review this subject thoroughly.

Stocks, Bonds and Exchange—Wentworth's Arithmetic, pp. 247 to 254.

Interest—Thorough review, drill on shortest methods of making calculations.

Proportion and Partnership—Wentworth's Arithmetic, pp. 264 to 266.

HISTORY AND GOVERNMENT—

History and Government of the United States through the Revolutionary Period.

Barnes' Brief History and Government Manual.

PHYSICAL CULTURE—Combine arm movements with body bendings. Teach stepping and swaying exercises.

See detailed course.

Importance of systematic exercise, effects of the same upon the brain.

Essay: Comparison and contrast of the education of Athenian and Spartan Youths.

WRITING—Same as A, Seventh Grade

MUSIC—All major and minor scales understood. All difficulties in time understood at a glance. Three and four parts singing. Drill in exercises still necessary.

DRAWING—No. 8 Drawing Book for Pupils. Preliminary Manual for teacher's use.

A collection of work, consisting of drawings and made-work should be called for each term in this grade.

Construction—Geometric views, working drawings,

developments of patterns, sections, problems in plane geometery, drawing to a scale.

Work both free-hand and instrumental.

Three dimensions expressed by two or more drawings.

Dotted lines for transferring measurements, dash lines for invisible edges, dot and dash lines for centre lines, and full lines for all outlines and visible edges.

Result lines in geometric work should be uniform, sharp black lines.

In instrumental drawing there should be no erasing, no piecing or patching of lines.

When pupils change from free-hand to instrumental work, teachers must see that the sharpening of pencils is changed to a wedge shape.

Representation. Appearance of form, composition, foliage from nature, effect of position and distance, convergence of receding edges of lines, foreshortening of surfaces, the level of the eye considered. All work must be free-hand, and new principles should be studied at blackboard before drawing in books; graduation of lines to represent nearness and distance.

The three dimensions expressed in one drawing.

Pupils must be taught how to look at things.

Objects must not be moved while drawing.

Pupils must not change their position, but look persistently in one direction until the drawing is finished.

The principles of the perspective given on pages

28 and 29 of Manual should be carefully developed.

Teach the terms horizon line, vanishing point. Edges must not coincide with each other, or with the table line. Continue to practice pencil measurement in space. Insist upon pupils sighting lengths and distances while drawing.

Frequent sketches for objects at home should be prepared by pupils.

Decoration—Historic ornaments. Egyptian, Greek and Gothic styles; natural growth in plants for conventionalized units, modification of bi-lateral units by curves obtained from a study of nature, principles of decorative design, original arrangements.

Teachers must seek to make pupils conscious of the need of certain principles in good ornament in order to satisfy the eye.

In teaching historic ornament, awaken interest by relating, if possible, a story of history or myth of literature. Give the period of its use, and location on map.

All good ornament possesses:

1. Order, which is produced by arrangement of parts.
2. Rythm, which is produced by repetition of parts.
3. Symmetry, which is produced by balance of parts.
4. Proportion, which is produced by inequality of parts.

5. Contrast. which is produced by variety of parts.
6. Intricacy, which is produced by subtlety of parts.
7. Breadth, which is produced by union of parts,
8. Stability, which is produced by union of parts.
9. Repose, which is produced by harmony of parts.

There are three original styles of ornament, all others are only modifications of these:

1. Egyptian; 2. Greek; Saracenic.

A CLASS—Eighth Grade.

LANGUAGE--Review capitalization and punctuation. Reed and Kellogg's One Book Course in English, lessons 122, 123 and 124.

Letter-writing reviewed and continued. One Book Course in English, pp. 286 to 292.

Modification of the parts of speech. Reed and Kellogg's One Book Course, lessons 85, 88, 90, 91, 92, 93, 98, 101, 102, 103 and 107.

Business correspondence and business forms reviewed and continued: advertisements, telegrams, etc.

Review work of Sixth, Seventh and B Eighth Grades. Much of this work can be done in connection with the study of suitable selections, classify the words and phrases, notice their use, etc. Use the text book for reference rather than for recitation.

Special attention given to work in composition in this grade.

Continue thought analysis of chosen selections.

Connect the work in original composition with the review of topics in history, government and literature.

READING—

The American Citizen—Dole.

Tales from Shakespeare, by Charles and Mary Lamb.

Merchant of Venice.

SPELLING—Use dictionaries to find meaning and pronunciation of new words in all lessons.

Reed's Word Lessons. Lessons 239, 240, 241, 236. 247, 248, 253, 254, 255, 258, 259, 260, 265, 266, 267, 270, 271, 272, 273, 276, 277, 278, 279, 280, 285, 286 and 287, with a review of all that is possible of work of previous classes.

ARITHMETIC—Square Root, Wentworth's Arithmetic, pp. 266 to 270.

Mensuration, pp. 278 to 292.

Miscellaneous problems and general review of entire course.

HISTORY AND GOVERNMENT—History and Government of the United States completed. Barnes' Brief History.

PHYSICAL CULTURE—Exercises of second series and review of all movements of preceding grade.

See detailed course.

Essay: Educational Advantages of American Young People.

MUSIC--Same as Class B.

DRAWING—Same as Class B.

In concluding this, my eighth year's work as Superintendent of your schools. allow me to express my appreciation of the loyal support and assistance of the principals and teachers, and their ready willingness to adopt and carry into effect all suggestions and directions given by me. Also to express to the Board of Education my appreciation of their liberality in supplying the schools with the best of modern books, apparatus and appliances, thus making it possible to bring about the present healthy and prosperous condition of the schools.

W. E. ROBINSON,

Superintendent of Schools.

Detroit, June 30, 1894.

REPORT OF THE SECRETARY.

REPORT OF THE SECRETARY.

To the Board of Education of the City of Detroit:

In compliance with the requirements of the rules of the Board I have prepared and herewith submit reports for the fiscal year ending June 30, 1894, on the financial and other matters pertaining to my office, as follows :

1st. Financial statement showing the receipt and disbursement of money.

2nd. A statement of expenditures by schools and for other objects :

3rd. A recapitulation of expenditures.

4th. A statement of the cost of free text books and books for teachers issued during the year,

5th. A list and description of buildings leased for school purposes.

6th. A list and description of buildings and valuation of real estate and buildings owned by the Board.

7th. A descriptive list of the real estate owned by the Board.

FINANCIAL STATEMENT.

BUILDING FUND.

Receipts.

From city for sale of bonds	$ 450,000 00
From sale of real estate	12,400 00
From transfer from repair fund	11,230 90
From interest on daily balances	4,068 06
Total	$ 477,698 96

Disbursements.

For real estate	$ 82,878 01
For new buildings	28,616 71
For furniture	1,826 15
For transfer to repair fund	11,230 00
For repayment of overdraft on treasurer	6,645 11
Total	$ 131,195 98
Balance on hand June 30, 1894	$ 346,502 98

REPAIR FUND.

Receipts.

From balance June 30, 1893	28,900 09
From city taxes	43,127 01
From primary school money	10,792 35
From Faulconer & Emory	2 10
From interest on daily balances	1,841 67
From transfer from building fund	11,230 00
Total	$ 95,893 22

Disbursements.

For materials	$	9,551 39
For labor		14,490 24
For work done by contract		7,614 84
For transfer to building fund		11,230 90
Total	$	42,887 37
Balance on hand June 30, 1894	$	53,005 85

SALARY FUND.

Receipts.

From balance June 30, 1893	$	8,041 74
From city taxes		365,163 77
From Primary School money		91,157 40
From interest on daily balances		6,986 94
Total	$	471.338 85

Disbursements.

For salaries of teachers	$	425,526 68
For salaries of janitors		37,743 78
For salaries of officers		9,947 41
For salaries of clerks		3,100 00
Total	$	476,317 87
Amount overdrawn June 30, 1894	$	4,969 02

GENERAL FUND.

Receipts.

From balance June 30, 1893	$	27,066 09
From city taxes		59,071 19
From Primary School money		14,724 26
From miscellaneous sources		1,100 09
From interest on daily balances		1,544 38
Total	$	103,506 01

Disbursements.

For text books	$	15,886 66
For school supplies		6,926 76
For Janitors supplies		1,882 19
For fuel and lights		21,251 68
For furniture		2,936 57
For repairs and alterations to furniture		1,766 02
For rent of offices and store room		2,150 04
For miscellaneous expenses of offices		2,714 66
For rent of Beecher's Hall and stores		9,750 00
For rent of Winterhalter Annex		525 00
For rent of Tilden Annex		400 00
For rent of Norvell Annex		135 00
For rent of land for Cottage Grove School		56 64
For census of school children		1,847 94
For sewer assessments		635 55
For paving assessments		2,547 24
For street opening assessments		149 93
For water rates and connections		1,191 42
For alterations and improvements to Beecher Hall		6,586 54
For insurance on apparatus etc., High		206 51
For fitting rented buildings for occupation		974 54

For moving Bellevue School to Hibbard		315 00
For apparatus for High School		151 29
For salary of stenographer and typewriter		377 90
For miscellaneous purposes		5,448 28
Total	$	86,813 47
Balance on hand June 30, 1894	$	16,692 54

BOOK OF REFERENCE FUND.

Receipts.

From balance June 30, 1893	$	832 71
From non-residents, for tuition		1,299 65
For interest on daily balances		48 98
Total	$	2,181 34

Disbursements.

For maps	$	740 65
Balance on hand June 30, 1894	$	1,440 69

SECRETARY'S CONTINGENT FUND.

Receipts.

From balance June 30, 1893	$	200 00

Disbursements.

None		
Balance on hand June 30, 1894	$	200 00

STATEMENT OF EXPENDITURES BY SCHOOLS

and Other Purposes.

BAGLEY SCHOOL.

Miss Nettie F. Richardson, Principal.

Fourteenth and Pine.

Teachers	$	4,810 00
Janitor		418 17
Labor		214 50
Coal		193 90
Wood		7 80
Water Tax		12 00
Lumber		20 20
Hardware		20 02
Tinwork		77 90
Miscellaneous		5 33
Total	$	5,779 82

BARSTOW SCHOOL.

Miss H. Adelaide Duncan, Principal.

Larned near Riopelle.

Teachers	$	9,442 00
Janitor		720 00
Labor		234 70
Coal		362 60
Wood		17 40
Kindling		10 96
Electricity		172 06
Lumber		179 69
Water Tax		25 00
Binding Books		10 90
Miscellaneous		4 25
Total	$	11,179 56

BELLEVUE SCHOOL.

Mrs. Anna Deane, Principal.

Bellevue near Champlain.

Teachers	$	2,225 00
Janitor		240 00
Labor		179 41
Wood		110 43
Kindling		2 74
Lumber		32 12
Water Tax		6 00
Window Shades		6 30
Miscellaneous		6 10
Total	$	2,808 10

BELLEFONTAINE SCHOOL.

Miss Margaret M. Lenahan, Principal.

Morrell, near Fort.

Teachers	$	6,866 50
Janitor		660 00
Labor		319 56
Coal	$	307 68
Wood		15 60
Kindling		8 22
Water tax		20 00
Lumber		51 24
Tinwork		28 72
Hardware		18 96
Sewer crock		33 11
Miscellaneous		10 07
Total	$	9,339 66

BISHOP SCHOOL.

Mr. C. F. Daniells, Principal.

Winder, near Rivard.

Teachers	$	15,649 88
Janitor		1,190 22
Labor		427 75
Coal		829 74
Wood		60 10
Kindling		16 44
Gas		55 03
Water tax		45 00
Lumber		71 35
Tinwork		125 77

Mason work		57 14
Repairing plaster		46 65
Window shades		15 13
Carpet		14 80
Repairing boiler		28 50
Iron castings		27 17
Steam fittings		25 18
Covering steam pipes		58 80
Heating and ventilating plans		55 00
Professional services		70 00
Miscellaneous		5 46
Total	$	18 875 11

BERRY SCHOOL.

Miss Margaret A. Holmes, Principal.

Concord and Charlevoix.

Teachers	$	6,911 62
Janitor		720 00
Labor		137 30
Coal		403 67
Water Tax		24 00
Filling in Lot		58 70
Repairing Roof		36 42
Furniture		20 00
Fittings		17 98
Flag		5 00
Miscellaneous		5 75
Total	$	8,340 44

BROWNSON SCHOOL.

Miss Augusta D. Schrader, Principal.

Maple and Chene.

Teachers	$	3,853 00
Janitor		420 00
Labor		198 65
Coal		222 03
Wood		11 45
Kindling		10 96
Water Tax		20 00
Lumber		91 98
Repairing Plaster		10 40
Total	$	4,838 47

CAMPBELL SCHOOL.

Miss Albina Aldridge, Principal.

St. Aubin and Alexandrine.

Teachers	$	4,300 00
Janitors		420 00
Labor		58 39
Wood		170 25
Kindling		4 11
Water Tax		12 00
Repairing Plaster		13 90
Lumber		9 27
Miscellaneous		5 84
Plans for Building		350 00
Total	$	5,343 76

CASS SCHOOL.

Mr. S. E. Whitney, Principal

Grand River and Second.

Teachers	$	18,100 00
Janitor		1,500 00
Labor		397 72
Coal		473 50
Wood		20 80
Kindling		10 96
Water Tax		35 00
Lumber		30 76
Repairing Roof		26 84
Repairing Plaster		25 00
Repairing Boiler		31 50
Steam Fitting		11 01
Heating and Ventilating Plans		55 00
Hardware		19 00
Binding Books		10 60
School Supplies		12 78
Cartage		9 00
Flag		5 00
Miscellaneous		13 92
Total	$	20,788 09

CHANEY SCHOOL.

Miss Marion Lair, Principal.

Sullivan near Linden.

Teachers	$	4,125 00
Janitor		420 00
Labor		196 05

Coal	195 73
Wood	7 80
Kindling	5 40
Water Tax	18 00
Lumber	42 03
Repairing Plaster	8 70
Hardware	5 94
Total	$ 5,024 73

CLAY SCHOOL.

Miss A. A. Michael, Principal.

Pitcher near Cass.

Teachers	$ 6,028 75
Janitor	540 00
Labor	173 87
Coal	277 15
Wood	10 40
Kindling	6 85
Water Tax	25 00
Repairing Roof	84 68
Miscellaneous	6 21
Total	$ 7,152 91

CLINTON SCHOOL.

Mr. James M. Manderille.

Clinton near Rivard.

Teachers	$ 5,031 70
Janitor	500 00
Labor	298 18

Coal		192 00
Wood		11 45
Kindling		8 22
Water Tax		16 00
Steam Fittings		17 67
Heating and Ventilating Plans		55 00
Repairing Tinwork		23 86
Mason Work		17 25
Repairing plaster		13 93
Window Shades		25 32
Miscellaneous		4 00
Total	$	6,214 58

COLUMBIAN SCHOOL.

Mr. George E. Parker, Principal.

Morrick near Twenty-Seventh.

Teachers	$	6,012 50
Janitor		630 00
Labor		58 13
Coal		375 91
Wood		15 60
Kindling		8 22
Water Tax		28 00
Street Opening		92 00
Cauldron		14 25
Janitor's Supplies		11 00
Hardware		14 33
Wheelbarrow		8 10
Dust Shields		6 75
Flag		5 00
Miscellaneous		6 01
Total	$	7,285 80

BALANCE PAID ON BUILDING.

Carpenters' Contract	$	4,958 80
Masons' "		2,564 39
Heating and Ventilating Contract		600 00
Furniture		1,940 50
Labor		566 12
Lumber		106 03
Sewer Assessment		200 90
Iron Work		45 00
Bell		78 00
Fittings		95 20
Tinwork		22 00
Shades		60 00
Total	$	11,236 94
Grand Total	$	18,422 74

COTTAGE GROVE SCHOOL.

Mr. W. H. Moore, Principal.

Van Dyke and Maple.

Teachers	$	800 00
Janitor		180 00
Labor		118 41
Wood		28 25
Kindling		4 11
Water Tax		5 00
Moving School		85 00
Lumber		66 51
Fittings		32 12

Rent of Lot		56 64
Repairing Plaster		9 90
Window Shades		4 16
Miscellaneous		6 59
Total	$	1,396 69

CRAFT SCHOOL.

Miss E. A. Lantz, Principal.

Vinewood and Ash.

Teachers	$	4,471 25
Janitor		540 00
Labor		106 78
Coal		317 22
Wood		16 10
Kindling		5 48
Water Tax		16 00
Gravel		84 00
Sodding		13 44
Fittings		5 98
Miscellaneous		6 61
Total	$	5,582 86

CUSTER SCHOOL.

Miss Sarah M. Howard, Principal.

Hammond and Ranspach.

Teachers	$	1,035 00
Janitor		180 00
Labor		114 99
Coal		44 82

Water Tax		8 00
Window Shades		7 72
Flag		5 00
Repairing Plaster		4 00
Fittings		3 66
Total	$	1,403 19

DICKINSON SCHOOL.

Miss E. E. Fdens, Principal.

Twelfth and Brigham.

Teachers	$	5,422 50
Janitor		540 00
Labor		122 94
Coal		147 50
Kindling		4 11
Water Tax		16 00
Lumber		9 09
Repairing Plaster		6 90
Sodding		9 60
Miscellaneous		1 08
Total	$	6,279 72

DUFFIELD SCHOOL.

Mr. William A. Ellis, Principal.

Clinton near Chone.

Teachers	$	12,912 50
Janitor		1,020 00
Labor		448 13
Coal		541 04

Kindling	16 44
Water Tax	40 00
School Supplies	43 54
Binding Books	8 00
Lumber	138 81
Repairing Roof	120 21
Sodding	71 30
Fence	60 00
Fittings	12 94
Hardware	12 13
Furniture	8 10
Repairing Plaster	5 00
Miscellaneous	6 58
Total	$ 15,464 72

EVERETT SCHOOL.

Miss Louise E. Rohnert, Principal.

Fort near Hastings.

Teachers	$ 8,027 00
Janitor	720 00
Labor	127 69
Coal	397 22
Wood	17 25
Kindling	12 33
Water Tax	20 00
Lumber	5 25
Miscellaneous	6 47
Total	$ 9,315 21

FARRAND SCHOOL.

Miss Amelia N. Dole, Principal.

Harper and John R.

Teachers	$	3,941 63
Janitor		600 00
Labor		215 34
Coal		301 50
Wood		11 30
Kindling		5 48
Water Tax		12 00
Lumber		34 00
Heating and Ventilating Plans		55 00
Castings		27 95
Stone Walk		24 93
Window Shades		6 19
Chair		5 00
Repairing Plaster		3 15
Steam Fittings		6 22
Miscellaneous		6 17
Total	$	5,355 86

FERRY SCHOOL.

Miss Emma E. Coughlan, Principal.

Ferry and Joseph Campau.

Teachers	$	5,605 50
Janitor		540 00
Labor		884 97
Coal		252 50

Wood		14 30
Kindling		4 11
Water Tax		20 00
Lumber		355 66
Galvanized Iron, etc		102 18
Hardware		21 12
Mason Work		37 75
Paints		26 58
Window Shades		43 66
Miscellaneous		13 04
Total	$	7,921 37

ADDITION TO BUILDING.

Mason	$	3,654 00
Heating and Ventilating		553 00
Total	$	4,207 00
Grand Total	$	12.128 37

FIRNANE SCHOOL.

Miss Emma R. Gray, Principal.

Fort near McDougall.

Teachers	$	4,102 00
Janitor		595 00
Labor		192 48
Coal		249 98
Wood		11 45
Kindling		3312

Water Tax	12 00
Heating and ventilating plans	55 00
Window Shades	33 72
Castings	16 54
Fittings	12 22
Lumber	28 08
Miscellaneous	5 67
Total	$ 5,326 47

FRANKLIN SCHOOL.

Miss I. H. Mackay, Principal.

Seventh near Locust.

Teachers	$ 4,500 00
Janitor	420 00
Labor	778 54
Coal	208 98
Wood	8 55
Kindling	5 48
Water Tax	12 00
Lumber	203 24
Repairing plaster	82 63
Castings	44 00
Fittings	41 88
Paint	19 34
Cement, etc	19 98
Tinwork	19 75
Repairing Roof	10 70
Hardware	5 80
Wire Guards	5 15
Electricity	3 13
Miscellaneous	2 96
Total	$ 6,392 11

HEATING AND VENTILATING SYSTEM.

Mason Work	$	1,248 69
Heating and Ventilating		2,140 00
Total	$	3,388 69
Grand total	$	9,780 80

GARFIELD SCHOOL.

Miss Anna J. McGrath, Principal.

Rivard and Fredorick.

Teachers	$	2,250 00
Janitor		306 00
Labor		92 29
Wood		85 43
Kindling		2 74
Water Tax		10 00
Tinwork		6 50
Repairing plaster		5 95
Lumber		4 22
Total	$	3,063 13

GRATIOT SCHOOL.

Miss Belle Stuart, Principal.

Gratiot near Leesville.

Teachers	$	800 00
Janitor		180 00
Labor		59 38

Coal		27 70
Wood		8 93
Kindling		4 11
Water Tax		5 00
Lumber		53 32
Street Opening		13 00
Miscellaneous		1 24
Total	$	1,152 68

HANCOCK SCHOOL.

Miss Harriet A. Marsh, Principal.

Hancock and Fourteenth.

Teachers	$	8,318 25
Janitor		720 00
Labor		312 36
Coal		400 48
Wood		5 70
Kindling		15 07
Water Tax		24 00
Mason Work		178 48
Gravel		78 00
Lumber		86 40
Sodding		22 98
Tinwork		16 29
Hardware		10 05
Miscellaneous		5 50
Total	$	10,193 56

HIBBARD SCHOOL.

Miss Elizabeth Courville, Principal.

Hibbard near Jefferson.

Teachers	$	1,750 00
Janitor		290 00
Labor		429 70
Coal		101 10
Wood		8 93
Kindling		4 11
Water tax		8 00
Purchase price of lot		800 00
Moving building		315 00
Excavating vault		60 00
Lumber		71 03
Widening Jefferson Avenue		33 00
Hardware		11 08
Crushed Stone		15 08
Stove Repairs		7 16
Window Shades		6 10
Surveying		5 00
Miscellaneous		1 60
Total	$	3,916 89

HICKEY SCHOOL.

Miss Clara E. Cogger, Principal.

Eighteenth and McGraw.

Teachers	$	1,810 00
Janitor		360 00

Labor	166 03
Coal	97 92
Wood	7 80
Kindling	4 11
Water Tax	8 00
Lumber	13 65
Water pans	5 00
Wire Guards	4 51
Total	$ 2,477 02

HIGH SCHOOL.

Mr. Frederick L. Bliss, Principal.

Jefferson and Brush.

Teachers	$ 39,489 25
Janitor	1,675 00
Labor	1,028 38
Coal	950 57
Wood	14 25
Kindling	29 07
Rent	9,750 00
Heating and Ventilating Apparatus	3,500 00
Fire Escapes	2,000 00
Supplies and Apparatus	2,311 80
Electricity and Gas	1,349 90
Furniture	642 61
Graduating Exercises	582 88
Lumber	417 57
Mason Work	316 67
Insurance	206 51
Printing	205 25
Stationary	119 63

Books	112 34
Electric Wiring	124 07
Piano	100 00
Water Tax	35 00
Telephone	36 00
Library Truck	22 50
Repairing Boiler	45 00
Fittings	91 87
Hardware	44 51
Electric Motor	40 00
Iron Troughs	19 50
Covering Pipes	27 35
Oil	10 10
Cleaning	16 89
Miscellaneous	20 74
Total	$ 65,335 21

CENTRAL HIGH SCHOOL.

Paid on Land	$ 54,500 00
Mason Work	16,827 00
Paving	2,771 94
Sewer	324 13
Labor	590 19
Expert Services Heating and Ventilating	214 50
Fittings	141 69
Hardware	25 45
Lumber	18 85
Surveying	6 00
Total	$ 75,419 75

HOUGHTON SCHOOL.

Miss Anna M. Joyce, Principal.

Abbott and Sixth.

Teachers	$	9,050 00
Janitor		750 00
Labor		207 95
Coal		302 58
Kindling		10 96
Gas		15 29
Water Tax		25 00
Heating and Ventilating Plans		55 00
Castings		35 49
Mason Work		30 73
Lumber		86 77
Binding Books		8 60
Flag		5 00
Miscellaneous		6 13
Total	$	10,589 50

HUBBARD SCHOOL.

Miss Harriet C. Park, Principal.

Twenty-Fifth and Labrosse.

Teachers	$	4,762 50
Janitor		420 00
Labor		169 00
Coal		171 00
Wood		7 80

Kindling	10 28
Water Tax	12 00
Sewer Assessment	209 95
Lumber	40 95
Fittings	2 52
Total	$ 5,806 00

IRVING SCHOOL.

Miss Rena Holbrook, Principal.

Willis near Woodward.

Teachers	$ 10,262 50
Janitor	750 00
Labor	347 63
Coal	603 50
Wood	10 40
Kindling	12 33
Water Tax	25 00
Lumber	26 75
Heating and Ventilating Plans	55 00
Mason Work	40 35
Castings	23 83
Fittings	22 32
Window Shades	40 80
Plastico	30 00
Paints	13 10
Help-Cleaning	10 00
Professional Services	9 00
Miscellaneous	1 90
Total	$ 12,284 41

JACKSON SCHOOL.

Miss Mary L. Redmond, Principal.

Fort near Chene.

Teachers	$	5,263 50
Janitor		540 00
Labor		139 62
Coal		303 38
Kindling		2 74
School Seats		261 69
Water Tax		24 00
Lumber		22 38
Window Shades		14 08
Cement		5 70
Miscellaneous		3 25
Total	$	6,580 34

JEFFERSON SCHOOL.

Mr. Fred W. Moe, Principal.

Selden and Crawford.

Teachers	$	13,129 12
Janitor		1,020 00
Labor		352 80
Coal		425 48
Wood		15 60
Kindling		10 96
Water Tax		25 00
Window Shades		20 79
Lumber		12 33

School Supplies		12 43
Hardware		6 82
Miscellaneous		5 83
Total	$	15,037 16

JOHNSTON SCHOOL.

Miss Jennie M. Ritchie, Principal.

Waterloo near Dubois.

Teachers	$	2,365 00
Janitor		306 00
Labor		64 85
Coal		190 40
Wood		8 93
Kindling		2 74
Water Tax		8 00
Tin Work		76 35
Window Shades		19 66
Lumber		13 84
Water Pans		5 00
Miscellaneous		2 90
Total	$	3,063 67

LINCOLN SCHOOL.

Mr. J. E. Bassett, Principal.

Brady and Antoine.

Teachers	$	5,075 00
Janitor		600 00

Labor		231 12
Coal		389 33
Wood		11 45
Kindling		5 48
Water Tax		25 00
Heating and Ventilating Plans		55 00
Castings		16 02
Mason Work		10 00
Shades		8 06
Flag		5 00
Repairing Plaster		3 50
Lumber		3 40
Miscellaneous		3 08
Total	$	6,441 44

LIVERNOIS SCHOOL.

Miss Sarah Whitley, Principal.

Livernois near Michigan.

Teachers	$	1,205 00
Janitor		180 00
Labor		240 13
Wood		79 50
Water Tax		5 00
Lumber		85 26
Cleaning Vault		30 87
Hardware		5 20
Flag		5 00
Total	$	1,835 96

McKINSTRY SCHOOL.

Miss Kitty Moynahan, Principal.

McKinstry and McMillan.

Teachers	$	4,675 00
Janitor		540 00
Labor		261 11
Coal		237 97
Wood		10 40
Kindling		5 48
Water Tax		16 00
Gravel		63 00
Electricity		54 02
Lumber		40 60
Miscellaneous		1 69
Total	$	5,905 27

MIAMI SCHOOL.

Mr. M. J. Whitney, Principal.

Miami, near Gratiot.

Teachers	$	4,775 00
Janitor		780 00
Labor		217 26
Coal		355 16
Wood		17 25
Kindling		12 33
Water Tax		50 00
Gas		37 71
Telephone		31 50

Sodding	31 00
Printing	12 25
Hardware	12 16
Laundering	12 00
Car Tickets	7 50
City Directory	6 00
Janitor's Supplies	5 75
Lumber	6 00
Miscellaneous	1 55
Total	$ 6,370 42

MILITARY AVENUE LOTS.

Amount paid for land	5,000 00
For interest on contract	42 00
For plans for building	350 00
For recording deed	1 06
Total	$ 5,393 06

NEWBERRY SCHOOL.

Mr. B. A. Nolan, Principal.

Twenty-ninth near Visger.

Teachers	$ 8,015 00
Janitor	720 00
Labor	329 70
Coal	368 38
Wood	15 60
Kindling	9 59
Water Tax	20 00
Electricity	38 06
Window Shades	37 00
Repairing plaster	29 65

Sodding		9 30
Sand		5 10
Total	$	9,597 38

NICHOLS SCHOOL.

Miss Margaret R. McCulloch, Principal.

Elm near Seventh.

Teachers	$	4,682 50
Janitor		420 00
Labor		129 55
Coal		196 13
Wood		10 40
Kindling		5 48
Water Tax		12 00
Lumber		5 20
Hardware		3 25
Miscellaneous		2 03
Total	$	5,466 54

NORVELL SCHOOL.

Miss Martha Baldwin, Principal.

Arndt near Campau.

Teachers	$	9,607 50
Janitor		750 00
Labor		246 72
Coal		603 34
Kindling		8 22

Water Tax	24 00
Tin Work	74 54
Heating and Ventilating Plans	55 00
Mason Work	20 47
Castings	12 19
Fittings	19 74
Hardware	3 70
Miscellaneous	3 00
Total	$ 11,428 42

NORVELL ANNEX.

Miss Martha Baldwin, Principal.

Arndt, near Chono.

Janitor	200 00
Labor	165 66
Rent	135 00
Coal	31 67
Water Tax	10 00
Lumber	146 22
Fittings	23 80
Hardware	13 63
Castings	8 95
Chairs	7 00
Miscellaneous	3 63
Total	$ 745 56

OAKLAND SCHOOL.

Miss Harriet M. Terry, Principal.

Holbrook and Oakland.

Teachers	$	1,162 50
Janitor		166 50
Labor		176 73
Coal		60 94
Wood		5 70
Lumber		34 70
Hardware		15 23
Repairing plaster		5 00
Blackboard		4 77
Miscellaneous		4 65
Total	$	1,636 72

JOHN OWEN SCHOOL.

Miss Kate E. Lenaghan, Principal.

Myrtle, near Thirteenth.

Teachers	$	5,410 00
Janitor		600 00
Labor		310 73
Coal		270 00
Wood		10 96
Water Tax		16 00
Heating and Ventilating Plans		55 00
Lumber		51 44

Fittings		10 32
Hardware		5 22
Repairing Stack		5 20
Wire Guards		3 00
Miscellaneous		1 25
Total	$	6,749 12

PALMER SCHOOL.

Mrs. E. A. Thompson, Principal.

Horton near Beaubien.

Teachers	$	4,970 00
Janitor		540 00
Labor		63 34
Coal		281 23
Wood		11 60
Kindling		8 22
Water Tax		20 00
Window Shades		15 48
Janitor's Supplies		5 75
Chairs		5 00
Repairing Plaster		4 25
Lumber		4 18
Miscellaneous		3 63
Total	$	5,932 68

PITCHER SCHOOL.

Miss I. F. Thirkell, Principal.

Sullivan and Butternut.

Teachers	$	8,683 87
Janitor		750 00

Labor		379 50
Coal		395 45
Wood		10 96
Water Tax		24 00
Lumber		137 76
Heating and Ventilating Plans		55 00
Tin Work		30 64
Miscellaneous		6 56
Total	$	10,473 74

POTTER SCHOOL.

Miss Maude Burrows, Principal.

Tillman near Myrtle.

Teachers	$	3,335 00
Janitor		420 00
Labor		134 93
Coal		184 76
Wood		10 40
Kindling		5 48
Water Tax		18 00
Lumber		3 23
Total	$	4,111 80

PULFORD AVENUE.

For balance on land	$	5,440 00

ROBERTS SCHOOL.

Miss Mary LaTour, Principal.

Adelaide, near Antoine.

Teachers	$	5,266 00
Janitor		540 00
Labor		110 59
Coal		281 93
Wood		11 45
Kindling		5 48
Water tax		10 00
Miscellaneous		2 10
Total	$	6,227 55

M. M. ROSE SCHOOL.

Miss Nettie Elliott, Principal

Van Dyke, near Gratiot.

Teachers	$	800 00
Janitor		180 00
Labor		48 70
Wood		33 90
Kindling		4 11
Water Tax		6 00
Lumber		4 80
Tin Work		40 35
Total	$	1,142 61

RUSSELL SCHOOL.

Mr. C. E. Swift, Principal.

Russell, near Eliot.

Teachers	$	4,707 50
Janitor		540 00
Labor		188 70
Coal		251 68
Wood		11 45
Kindling		9 59
Water Tax		16 00
Window Shades		24 52
Lumber		18 93
Fittings		4 55
Miscellaneous		2 50
Total	$	5,775 42

SEVENTEENTH STREET LOTS.

Amount paid for land	$	7,600 00
Plans for building		100 00
Surveying		7 00
Grand Total	$	7,707 00

SEWARD AVENUE LOTS.

Amount paid for land	$	4,590 00
Plans for building		125 00
Total	$	4,715 00

TAPPAN SCHOOL.

Miss Helen McKerrow, Principal.

Thirteenth and Lafayette.

Teachers	$	11,770 00
Janitor		1,080 00
Labor		249 84
Coal		650 59
Wood		15 60
Kindling		10 96
Water Tax		35 00
Window Shades		76 26
Heating and Ventilating Plans		55 00
Repairing Boiler		57 20
Castings		64 60
Covering Pipes		19 25
Tin Work		37 03
Fittings		14 22
Scdding		33 72
Lumber		16 17
Repairing Plaster		15 25
Desk		25 00
Rug		21 00
Miscellaneous		10 27
Total	$	14,256 96

ANNEX.

Mason Contract	$	930 00
Total	$	15,106 96

TILDEN SCHOOL.

Miss Ella M. Sheeran, Principal.

Kirby and Seventh.

Teachers	$	9,800 00
Janitor		720 00
Labor		211 39
Coal		385 65
Wood		35 10
Kindling		8 22
Water Tax		25 00
Sodding		25 10
Repairing Plaster		21 15
Lumber		11 41
Miscellaneous		4 84
Total	$	11,247 86

TILDEN ANNEX.

Miss M. R. Alexander, Principal.

Corner Kirby and Lincoln.

Teachers	$	1,525 00
Janitor		200 00
Labor		139 17
Rent		400 00
Lumber		70 27
Water Tax		10 00
Hardware		3 40
Fittings		14 48

Chairs		7 00
Wood		2 85
Miscellaneous		4 55
Total	$	2,376 72

TRAINING SCHOOL.

Miss Harriet M. Scott, Principal.

Miami, near Gratiot.

Teachers	$	7,397 50
Graduating Exercises		183 91
Tables		10 50
Stationary		6 50
Total	$	7,598 41

TROWBRIDGE SCHOOL.

Miss Margaret A. King, Principal.

Forest, near Antoine.

Teachers	$	9,687 00
Janitor		720 00
Labor		232 10
Coal		448 83
Wood		11 60
Kindling		5 48
Water Tax		15 00
Lumber		7 26
Tin Work		7 49
Miscellaneous		5 09
Total		11,139 85

VAN DYKE SCHOOL.

Miss Janet McKenzie, Principal.

Field and Agnes.

Teachers	$	4,971 50
Janitor		540 00
Labor		176 82
Coal		288 90
Wood		11 60
Kindling		5 48
Water Tax		16 00
Repairing Plaster		25 50
Repairing Boiler		5 00
Lumber		3 17
Fittings		1 05
Miscellaneous		5 92
Plans for addition		125 00
Total	$	6,175 94

VAN DYKE AVENUE LOTS.

Balance on land		5,000 00
For plans for building		350 00
Surveying		10 00
Widening Jefferson Avenue		800 00
For recording deed		2 43
Total	$	5,222 61

WASHINGTON SCHOOL.

Mr. J. N. Meaul, Principal.

Beaubien near Madison.

Teachers	$	10,125 00
Janitor		720 00
Labor		212 29
Coal		363 26
Wood		11 45
Kindling		8 22
Water Tax		25 00
Electricity		30 30
Repairing plaster		23 30
Window Shades		3 86
Miscellaneous		6 09
School Furniture		1443 80
Total	$	12,972 57

WEBSTER SCHOOL.

Mr. C. B. Hall, Principal.

Twenty-First and Howard.

Teachers	$	15,512 50
Janitor		1,200 00
Labor		627 94
Coal		571 66
Water Tax		36 00
Lumber		125 70
Mason Work		324 79
Repairing Boiler		294 33

Covering Pipes	55 80
Fittings	58 59
Heating and Ventilating Plans	55 00
Castings	15 36
Moving Boiler	22 00
Tinwork	152 22
Hardware	13 38
Repairing Plaster	16 85
Paint and Glass	11 53
Chairs	9 25
School Supplies	7 72
Miscellaneous	5 35
Total	$ 19,116 42

WILKINS SCHOOL.

Mr. J. W. Kennedy, Principal.

Porter and Second.

Teachers	$ 9,558 11
Janitor	720 00
Labor	317 59
Coal	415 08
Wood	10 40
Kindling	12 33
Water Tax	25 00
Tin Work	105 00
Lumber	27 03
Stove	18 00
Repairing plaster	16 25
Desk	12 00
Book Case	12 00
Hardware	8 70
Wire Guards	6 85

Shades	6 26
Miscellaneous	10 64
Total	$ 11,281 24

WILLIAMS SCHOOL.

Mr. W. C. Martindale, Principal.

Canfield near Mt. Elliott.

Teachers	$ 8,850 00
Janitor	716 00
Labor	117 68
Coal	476 33
Wood	11 45
Kindling	8 22
Water Tax	24 00
Lumber	51 58
Street opening	40 00
Sodding	34 32
Miscellaneous	6 25
Total	$ 10,336 13

WINTERHALTER SCHOOL.

Miss H. J. Barcroft, Principal.

Junction and River.

Teachers	$ 1,310 00
Janitor	200 00
Labor	217 74
Rent	525 00

Coal	83 07
Wood	10 40
Kindling	2 74
Lumber	126 63
Fittings	33 03
Hardware	11 56
Water Tax	10 00
Chairs	7 00
Miscellaneous	8 36
Total	$ 2,545 53

DUFFIELD NIGHT SCHOOL.

Mr. C. E. Swift, Principal.

Teachers	$ 1,002 00
Janitor	151 50
Oil	31 92
Total	$ 1,185 42

EVERETT NIGHT SCHOOL.

Mr. J. M. Manderille, Principal.

Teachers	$ 1,114 50
Janitor	151 50
Oil	38 48
Labor	3 59
Total	$ 1,308 07

JEFFERSON NIGHT SCHOOL.

Mr. O. G. Frederick, Principal.

Teachers	$	794 25
Janitor		151 50
Oil		21 71
Labor		5 00
Express		1 50
Total	$	973 96

NEWSBOYS NIGHT SCHOOL.

Mr. Frank Ooly, Principal.

Teachers	$	355 25
Janitor		61 00
Lumber		33 25
Labor		19 86
Coal		17 10
Total	$	486 46

NORVELL NiGHT SCHOOL.

Mr. J. E. Bassett, Principal.

Teachers	$	1,065 50
Janitor		151 50
Oil		47 92
Labor		70
Total	$	1,265 62

PITCHER NIGHT SCHOOL.

Mr. W. C. Martindale, Principal.

Teachers	$	1,130 25
Janitor		151 50
Oil		25 35
Miscellaneous		1 14
Total	$	1,308 24

TROWBRIDGE NIGHT SCHOOL.

Mr. E. C. Whitney, Principal.

Teachers	$	1,583 50
Janitor		151 50
Oil		56 30
Labor		11 78
Bookkeeping Manual		2 00
Total	$	1,805 08

WEBSTER NIGHT SCHOOL.

Mr. S. R. Thornton, Principal.

Teachers	$	1,034 00
Janitor		151 50
Oil		66 23
Miscellaneous		1 59
Total	$	1,253 32

WILKINS NIGHT SCHOOL.

Mr. J. W. Kennedy, Principal.

Teachers	$	1,037 50
Janitor		151 50
Oil		29 41
Labor		11 94
Total	$	1,230 35

SPECIAL TEACHERS.

Special Teachers	$	9,810 00

BOOKS AND SCHOOL SUPPLIES.

Text Books	$	14,937 53
Clerk Salary		720 00
Binding Books		255 30
Delivering Books (cartage)		235 70
Rent of Book Room		200 04
Miscellaneous Articles		15 25
School Stationery (scratch pads, spelling slips, examination and drawing paper, etc.)		1,349 74
School Supplies (pens, lead pencils, slate pencils, pegs lentils etc.)		902 22
School Printing (blanks, registers, etc)		921 21
Drawing Models		611 50
Maps		770 65
Modulators		118 40
Music Coda's		85 97
Music Charts		67 60
Total	$	21,191 11

GENERAL OFFICES EXPENSES.

Rent	$	1,650 00
Janitor		360 00
Printing (proceedings, etc.)		771 10
Advertising		750 63
Printing Annual Report		279 00
Postage		233 50
Check Books		63 00
Eldctric Motor		48 25
Electric Light		30 91
Ice		19 15
Labor		15 59
Laundry		11 50
Cleaning Carpets		10 57
Sundries		4 90
Total	$	4.248 10

SECRETARY'S OFFICE EXPENSES.

Clerks (Salary)	$	2,037 90
Stationery		78 40
Blank Books		45 25
Telephone		30 00
City Directory		6 00
Sundries		9 74
Postal Scale		2 50
Total	$	2.209 79

SUPERINTENDENT'S OFFICE EXPENSES.

Clerk, Salary	$	720 00
Telephone		30 00

Stationery		13 91
Water Cooler		9 50
City Directory		6 00
Total	$	779 41

SUPERVISOR'S OFFICE EXPENSES.

Clerk, Salary	$	720 00
Rent		300 00
Electric Light		55 46
Telephone		30 00
Printing		30 30
Stationery		14 83
Total	$	1,150 59

STORE ROOM.

Janitor's Supplies	$	947 89
Hardware		394 80
Clerk, Salary		285 00
Labor		186 13
Lamps		104 76
Rubber Matting		95 96
Clocks		71 32
Halyards		61 24
Nigrosine		41 93
Baskets		41 25
Oil		45 45
Stationery		32 91
Crayon		25 92
Lumber		34 43
Carpet Remnants		25 00
Chairs		24 50
Brushes		21 45

Cotton Cloth		16 81
Sundry Articles		14 45
Flag		5 00
Paper		4 79
Total	$	2,480 99

SHOPS.

Paints	$	1,653 70
Labor		1,325 41
Lumber		694 75
Hardware		275 21
Fire Pots		133 92
Oil		70 37
Fittings		52 78
Telephone		30 00
Sundries		28 78
Ladders		25 00
Sewer Crock		19 24
Cement		9 30
Sponges		6 25
Cotton Cloth		5 80
Water Tax		5 00
Total	$	4,335 51

MISCELLANEOUS.

Labor	$	256 02
Extra Legal Services		250 00
Supreme Court Fees		87 10
Superintendentent's Trip to Convention		83 65
Livery		108 50
Chairs		141 55

Book Case		46 00
Tables		40 80
Ink Wells		44 65
Engrossing Resolutions		25 00
Cartage		92 26
Freight		52 61
Wood Sawing		26 00
Sundries		96 68
Total	$	1,350 82
Grand Total	$	696,851 15

RECAPITULATION OF EXPENDITURES.

Bagley	$ 5,779 82
Barstow	11,179 56
Bellefontaine	8,339 66
Bellevue	2,808 10
Berry	8,340 44
Bishop	18,875 11
Brownson	4,838 47
Cambbell	5,343 76
Cass	20,788 09
Chaney	5,024 73
Clay	7,152 91
Clinton	6,214 58
Columbian	18,422 74
Cottage Grove	1,396 69
Craft	5,582 86
Custor	1,403 19
Dickinson	6,279 72
Duffield	15,464 72
Everett	9,315 21
Farrand	5,355 86
Ferry	12,128 37
Firnane	5,326 47
Franklin	9,780 80
Garfield	3,063 13
Gratiot	1,152 68

Hancock	10,193 56
Hibbard	3.916 89
Hickey	2,477 02
High "Biddle"	65,335 21
High "Central"	75,419 75
Houghton	10.589 50
Hubbard	5,806 00
Irving	12,284 41
Jackson	6,580 34
Jefferson	15,037 16
Johnston	3,063 67
Lincoln	6.441 44
Livernois	1,835 96
McKinstry	5,905 27
Miami	6,370 42
Military Avenue "Site"	5,393 06
Newberry	9,597 38
Nichols	5,466 54
Norvell	11.428 42
Norvell Annex	745 56
Oakland	1.636 72
Owen, John	6,749 12
Palmer	5,932 68
Pitcher	10,473 74
Potter	4,111 80
Pulford Avenue "Site"	5,440 00
Roberts	6,227 55
Rose, M. M	1,142 61
Russell	5,775 42
Seventeenth Street "Site"	7,707 00
Seward Avenue "Site"	4,715 00
Tappan	15,186 96
Tilden	11,247 86
Tilden Annex	2,376 72
Training	7,598 41
Trowbridge	11,139 85
Van Dyke	6,175 94

Van Dyke Avenue "Site"	5 222 61
Washington	12,972 57
Webster	19,116 42
Wilkins	11.281 24
Williams	10,336 13
Winterhalter	2.545 53
Duffield Night	1.185 42
Everett Night	1.308 07
Jefferson Night	973 96
Newsboys Night	486 46
Norvell Night	1,265 62
Pitcher Night	1,308 24
Trowbridge Night	1,805 08
Webster Night	1.253 32
Wilkins Night	1.230 35
Special Teachers	9,810 00
Books and School Supplies	21.191 11
General Office Expenses	4,248 10
Secretary's Office Expenses	2.209 79
Superintendent's Office Expenses	779 41
Supervisor's Office Expenses	1,150 59
Store Room	2.480 99
Shops	4.335 51
Miscellaneous	1,350 82
Total	$ 696,851 15

COST OF FREE TEXT BOOKS AND BOOKS FOR TEACHERS ISSUED DURING THE YEAR.

NAME OF SCHOOL.	For Pupils.	For Teachers.
Bagley	85 86	29 27
Barstow	355 25	57 96
Bellefontaine	379 81	45 20
Bellevue	2 95	13 97
Berry	385 60	50 82
Bishop	642 04	82 77
Brownson	103 21	32 24
Campbell	58 31	25 81
Cass	669 06	67 34
Chaney	90 83	32 05
Clay	99 70	34 90
Clinton	155 22	38 34
Columbian	709 14	54 07
Cottage Grove	2 18	5 00
Craft	198 65	34 35
Custer	52 94	8 05
Dickinson	113 65	33 20
Duffield	606 64	56 01
Everett	316 21	41 15
Farrand	149 85	28 80
Ferry	73 69	40 80
Firnane	96 09	29 66
Franklin	96 67	26 30
Garfield	52 61	20 86
Gratiot	8 44	5 29
Hancock	306 98	39 76
Hibbard	52 40	17 88
Hickey	17 89	15 84
Houghton	265 05	43 46
Hubbard	69 95	35 66

COST OF TEXT BOOKS AND BOOKS FOR TEACHERS—Continued.

NAME OF SCHOOL.	For pupils.	For Teachers
Irving	557 78	31 68
Jackson	92 95	43 81
Jefferson	526 39	57 51
Johnston	33 26	20 70
Lincoln	82 70	38 72
Livernois	2 19	5 97
McKinstry	86 52	41 90
Miami	56 10	.....
Newberry	238 89	56 62
Nichols	120 59	26 43
Norvell	280 05	66 11
Oakland	57 64	7 74
Owen, John	122 60	36 53
Palmer	72 11	44 75
Pitcher	369 40	38 50
Potter	62 79	34 48
Roberts	185 65	35 47
Rose, M. M.	1 27	5 00
Russell	104 57	40 29
Tappan	458 14	66 34
Tilden	549 03	48 53
Tilden Annex	62 96	12 16
Training	109 91	81 19
Trowbridge	500 19	47 75
Van Dyke	154 82	35 26
Washington	251 06	46 95
Webster	663 42	84 46
Wilkins	337 13	43 33
Williams	342 25	51 56
Winterhalter	45 31	11 19
Night Schools	473 65	.....
Miscellaneous	23 04	17 41

BUILDINGS LEASED FOR SCHOOL PURPOSES.

NAME OF SCHOOL.	Seating Capacity	LEASED FROM.	When Leased.	Yearly Rental.
High "Biddle"	1,094	Beecher Estate	Feb. 1, 1893	$ 9,000
Norvell "Annex"	133	First Presb. Ch. Soc.	Aug. 20, 1893	180
Tilden "Annex"	100	V. W. Phillips	Sept. 1, 1893	400
Winterhalter	131	L. G. Winterhalter	Aug. 15, 1893	600
Total	1,458			$ 10,180

LIST AND DESCRIPTION OF BUILDINGS AND VALUATION OF REAL ESTATE AND BUILDINGS.

NAME.	When erected.	Material.	Kind of roof	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Bagley	1884	Brick...	Shingle	2	6	351	Thatcher furnaces.	$ 3,700	$ 15,000	$ 18,700
Barstow	1849 1870	Brick...	Shingle	3	12	578	Smead	8,580	30,000	38,580
Bellefontaine	1887	Brick...	Shingle	2	10	515	Smead	4,250	25,000	29,250
Bellevue	1869	Brick.	Shingle	2	3	152	Stoves	3,100	2,500	5,600
Bellevue New								2,400		2,400
Berry	1892	Brick...	Metal and slate.	2	12	588	Smead	6,150	32,000	38,150
Bishop	1858 1881	Brick...	Shingle	3	22	1180	Smead	11,300	56,000	67,300
Brownson	1887	Brick...	Metal and slate.	2	6	300	Smead	6,000	18,000	24,000
Campbell	1874	Frame.	Shingle	2	6	300	Stoves	5,300	6,000	11,300
Cass	1861 1883	Brick,	Metal and shingle	3	22	1065	Steam	57,000	45,000	102,000
Chaney	1887	Brick...	Metal and slate.	2	6	300	Smead	3,000	18,000	21,000

LIST AND DESCRIPTION OF BUILDINGS, ETC.—Continued.

NAME	When erected	Material	Kind of roof	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Clay.	1873 1898	Brick.	Metal and slate	2	8	96	Smead.	$ 10,000	$ 25,000	$ 35,000
Clinton..	1870 1876	Brick.	Shingle..	2	8	440	Steam	5,840	18,000	23,840
Columbian	1892	Brick.	Metal and slate	2	12	588	Smead	3,200	32,000	35,200
Cottage Grove.	1889	Frame.	Shingle.	1	1	35	Stoves	.....	300	300
Craft	1886 1891	Brick	Shingle.	2	8	96	Smead.	3,560	20,000	23,560
Custer.	1889	Frame.	Shingle.	2	2	125	Stoves..	1,000	3,000	4,000
Dickinson.	1889	Brick.	Metal and slate.	2	8	396	Smead..	4,500	25,000	29,500
Duffield.	1866 1892	Brick..	Shingle.	3	17	903	Smead.	15,500	45,000	60,500
Ellery St. Site								5,940		5,940
Everett..	1869 1873	Brick.	Shingle.	3	12	696	Smead.	6,000	25,000	31,000

LIST AND DISCRIPTION OF BUILDINGS, ETC.—Continued.

NAME.	When erected.	Material.	Kind of roof.	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Farrand	1883	Brick...	Shingle	2	6	300	Steam	$ 5,700	$ 18,000	$ 23,700
Ferry	1886 1889	Frame.. Brick..	Shingle	2	8	396	Smead and stoves	5,000	18 000	23,000
Firnane	1882	Frame..	Shingle	2	6	363	Steam	3,950	12,000	15,950
Franklin	1866	Brick...	Shingle	2	6	338	Thatcher furnaces...	6,400	4,000	10,400
Garfield	1872 1886	Frame..	Shingle	2	4	204	Stoves	6,300	4,000	10,300
Gratiot	1868	Brick...	Shingle	1	1	42	Stoves	1,500	1,500	3,000
Hancock	1887 1891	Brick...	Metal and slate..	2	12	588	Smead	7,500	30,000	37,500
Hibbard	1886	Frame..	Shingle	2	4	227	Stoves	2,800	2,500	5,300
Hickey	1873 1888	Frame..	Shingle	2	4	196	Furnaces	3,000	4,000	7,000
High Central	1893							58,000	17,000	75,000

LIST AND DISCRIPTION OF BTILDINGS, ETC.—Continued.

NAME.	When erected	Material.	Kind of roof.	No. of stories.	No. of rooms.	Sitting capacity.	How heated.	Value of lot.	Cost of building.	Total.
Houghton	1852	Brick	Shingle	1	12	508	Steam	$ 7,500	$ 20,000	$ 27,500
Hubbard	1887	Brick.	Metal and slate.	2	6	90	Smead..	5,000	18,000	23,000
Irving.	1882	Brick	Shingle.	2	12	681	Steam	18,750	35,000	53,750
Jackson.	1891	Brick	Metal and slate	2	8	86	Smead .	15,000	18,100	33,100
Jefferson	1871 1892	Brick...	Shingle	3	17	857	Smead..	9,200	45,000	54,200
Johnson	1884	Brick.	Shingle.	2	4	222	Thatcher furnaces	3,000	10,000	13,100
Lincoln	1887	Brick.	Shingle.	2	8	448	Steam	7,250	24,000	31,250
Livernois..	1870	Frame.	Shingle	2	2	117	Stoves.	1,650	2,000	3,650
McKinstry	1886 1890	Frame.	Shingle. ...	2	8	396	Smead.	3,000	12,000	15,000
Miami	1887 1890	Brick.	Metal and slate	2	10	492	Smead..	29,530	25,000	54,530

LIST AND DESCRIPTION OF BUILDINGS, ETC.—Continued.

NAME.	When erected.	Material.	Kind of roof.	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Military Ave. "Site."	.....	.....	.....	....	....	.....	.....	$ 5,000	.....	$ 5,000
Newberry.	1886 1889	Brick.	Metal and slate	2	12	588	Smead	4,000	$ 30,000	34,000
Nichols	1868 1883	Frame	Shingle	2	6	300	Smead	6,350	10,000	350
Norvell	1880	Brick	Shingle	2	12	646	Steam	5,760	30,000	760
Oakland	.....	Frame	Shingle	1	2	82	Stoves	1,000	200	1,200
Owen, John	1880	Brick	Shingle	2	8	411	Steam	6,300	18,000	24,300
Palmer	1890	Brick	Metal and slate	2	8	396	Smead	6,000	18,000	24,000
Pitcher	1871	Brick	Shingle	3	12	560	Steam	4,000	30,000	34,000
Potter	1889	Brick	Metal and slate	2	6	300	Smead	3,000	18,000	21,000
Roberts	1890	Brick	Metal and slate	2	8	396	Smead	5,000	25,000	30,000
Rose	1886	Brick	Shingle	1	1	48	Stoves	3,000	1,500	4,500
Bussell	1887	Brick	Metal and slate	2	8	396	Smead	Leased	25,000	25,000

LIST AND DESCRIPTION OF BUILDINGS, ETC.—Continued.

NAME.	When erected.	Material.	Kind of roof.	No. of stories.	No. of rooms.	Seating capacity.	How heated.	Value of lot.	Cost of building.	Total.
Seventeenth St. site.								$ 7,600		$ 7,600
Seward Ave. site								4,500		4,590
Tappan	1868 1886	Brick	Shingle	3	16	831	Steam	7,600	$ 30,000	37,600
Tilden	1887	Brick	Metal and slate	2	12	588	Smead	7,450	30,000	37,450
Trowbridge	1889	Brick	Metal and slate	2	12	588	Smead	11,400	30,000	41,400
Van Dyke	1887	Brick	Metal and slate	2	8	396	Smead	7,500	25,000	32,500
Van Dyke Ave. site								5,200		5,200
Washington	1871	Brick	Shingle	3	12	576	Smead	8,780	25,000	33,780
Webster	1875 1885	Brick	Shingle	2	19	1060	Steam	6,000	45,000	51,000
Wilkins	1870 1873	Brick	Shingle	3	12	600	Smead	7,200	25,000	32,200
Williams	1890	Brick	Metal and slate	2	12	588	Smead	4,900	34,000	39,800
Workshop		Frame	Shingle	2				1,360	1,500	2,860

DESCRIPTIVE LIST OF REAL ESTATE.

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Bagley	N E Fourteenth ave and Pine	Lots 70-71 Godfroy farm, p. c. 726
Barstow	S Congress, near Riopel.e	Lots 70-31, 84 ft. 71 Riopelle farm, p. c. 13.
"	N Larned, near Riopelle	Lots 68-69 Riopelle farm, p. c. 13
Bellefontaine	W Morrell, near Fort	Lots 8-9-10-11-12 sub. lot 10, p. c. 30.
Bellevue	W Bellevue, near Champlain	Lots 34-35-36 Desnoyers sub. Beaufait farm, p. c. 19
Bellevue, "n'w"	W Bellevue, near Waterloo	Lots 36-37-38 Dupont's sub. Meldrum farm
Berry	N W Concord and Charlevoix	Lots 45-46-47-48-49-50-51-52, 17 ft. lot 44 McLeod sub. p. c. 19
Bishop	N Winder, near Rivard	Part lot 183 Rivard farm
"	" " "	W 4-ft. lots 66-81 Rivard farm
Brownson	S Maple, near Chene	Lots 33-34-35-36-37 of A. Crane's sec. of Chene farm
Campbell	N E St. Aubin and Alexandrine	One acre of north end lot 40 St. Aubin farm
Cass	N W Gd. River and Second aves	Block 76 Cass farm
Chaney	E Sullivan, near Linden	Lots 43-44-45-46-47 McBride & Clark's sub. lot 6, p. c. 729
Clay	S Pitcher, near Cass	Lots 10-11 block 87 Cass farm
Clinton	S Clinton, near Rivard	Lots w ½ 95-96-97-e ½ 98 Mullett farm
Columbian	S E Merrick and 27th	Lots 1-2-3-4-5-6 Hubbard & Dingwall's sub. lots 219 to 256 Johnston's sub. Campau f., p. c. 78
Craft	N E Ash and Vinewood	Lots 20-22-24 Campau's sub. w. ½ p. c. 78
Custer	W Hammond, near Ranspach	Lots 81-82-83 Ranspach's sub. p. c. 574
Dickinson	N W Twelfth near Brigham	Lots 22-23.24-25.26 Wesson's sub. Thompson farm, p. c. 227,
Duffield	S Clinton, near Chene	Lots 4-5-6 s. Clinton; lots 4-5-6 n. Macomb, Chene farm
Everett	S Fort, near Rivard	Lot 41, Rivard farm
"	" " "	Lot 42, " "
Ellery St. site	N E Pulford and Ellery	Lots 1-2-3-4-5-6-7 bk. 4 Zenders s. lots 16-17-18 Lieb farm
Farrand	S W Harper and John R.	Lots 15-16-17 Harper Hospital sub. of lot 3 and s. 110 ft. of lot 2. Park lot 45.
Ferry	N E Ferry and Campau	Part block 63 Jos. Campau farm p. c. 609
Firnane	S Fort, near McDougall	Lots 16-17-18 Wendell's sub. bk. 6, McDougall f., p. c. 9 and 454
Franklin	S W Pine and Seventh	Com'cing 100 ft. n. of s. e. cor. of lot 9 Baker fm. run'g n 198 f
Garfield	N E Rivard and Frederick,	Lots 36-37-38-39-40-41 Gunn's sub. lot 8, Mullett farm
Gratiot, "new"	N W Gratiot and Butler	N. w. cor. of back concession p. c, 337 and 257.
Hancock	N E Hancock and Fourteenth	Lots 459-460-461-462-463 Godfroy farm, p. c. 726.

DESCRIPTIVE LIST OF REAL ESTATE.

DIMENSIONS.	COST OR SITE.	DATE OF PURCHASE	DEED RECORDED.	VALUATION 1894
82 ft. on 14 x 145 on Pine.	$ 2,100	Feb. 24, 1883	L 234, p 587	$ 8,700
81.84 ft on Congress x 130 deep	3,000	April 1, 1896	L 122, p 266	
" " " "	600	May 14, 1849	L 35, p 532	8,580
250 ft. on Morrell x 140.5 deep	Annexed	Sept. 8, 1898	L 301, p 157	4,250
129 ft. on Bellevue x 163.27 deep	Annexed	Nov. 19, 1896	L 294, p 76	3,100
120 ft. on Bellevue x 153.44 deep	1,500	June 15, 1887	L 313, p 315	2,400
220.09 ft. on Concord x 153.27 deep.	6,150	Dec. 4, 1891	L 336, p 464	6,150
150 ft. on winder x 210 deep	5,000	Mar. 12, 1856	L 62, p 684	11,300
4 " " "	300	Sept. 6, 1870	L 147, p 600	
		July 12, 1870	L 147, p 310	
150 ft. on Maple x 105.28 deep.	5,550	Sept. 29, 1887	L 310, p 549	6,000
			L 317, p 278	
105.73 ft. on St. Aubin x 273.10 on Alexandrine	2,000	Dec. 20, 1872	L 178, p 292	5,300
382.26 ft. on Gd. River x 300 ft. on Sec. ave. x 250.33 ft. on High st.	Donated by Lewis Cass	July 2, 1860	L 84, p 375	57,000
150 ft. on Sullivan x 215.50 deep	2,200	June 30, 1887	L 310, p 303	3,000
			L 313, p 347	
			L 310, p 318	
100 ft on Pitcher x 190 deep	1,200	June 26, 1873	L 158, p 632	10,000
150 ft. on Clinton x 105.25 deep.	9,000	July 31, 1869	L 140, p 212	5,840
		Nov. 5, 1875	L 192, p 633	
		June 2, 1876	L 202, p 327	
		Nov 8, 1875	L 192, p 632	
180.27 ft. on 27th x 142.79 on Merrick	3,200	Dec. 4, 1891	L 384, p 428	3,200
148.27 ft. on Vinewood x 156 on Ash	3,500	June 21, 1886	L 303, p 406	3,550
90 ft. on Hammond x 150 deep.	1,000	July 27, 1886	L 303, p 450	1,000
153 on 12th x 100 on Brigham	3,550	July 21, 1865	L 116, p 610	4,500
		July 2, 1869	L 349, p 338	
		Nov. 22, 1890	L 349, p 416	
150 ft. on Clinton x 210 deep	2,775	Aug. 5, 1863	L 146, p 73	15,500
			L 121, p 630	
			L 146, p 509	
		Sept. 1, 1864	L 141, p 271	
50 ft. on Fort x 138.33 deep.	4,000	Sept. 14, 1862	L 178, p 324	6,000
" " " "	170	Sept. 30, 1843	L 15, p 145	
220 ft. on Fulford x 51.82 deep; also land in rear, making 108 ft. deep.	5,940	April 3, 1893	L 431, p 514	5,940
96.84 ft. on Harper x 160.40 on John R	3,000	May 1, 1883	L 259, p 243	5,700
222.40 on Ferry x 150 on Campau x 150 on Mitchell	2,750	Aug. 5, 1896	L 286, p 28	5,000
		April 29, 1871	L 178, p 295	
79 ft. on Fort x 138.33 deep	1,725	April 6, 1871	L 153, p 179	3,960
		Aug. 25, 1864	L 111, p 92	
198 ft. on 7th x 120 on Pine	2,400	Feb. 6, 1860	L 120, p 49	6,400
145.09 on Rivard x 180 on Frederick	3,250	July 27, 1896	L 303, p 414	6,300
207.50 on Gratiot x 165 deep.	Annexed	Feb. 17, 1899	L 157, p 227	1,500
200 ft. on 14th x 145 on Hancock	2,115	Oct. 27, 1863	L 262, p 508	7,500

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Hibbard	W Hibbard near Jefferson	Lot 13 Wesson's sub, lots 2 and 3 Crane's sub p c 634
"	W Hibbard near Jefferson	Lot 14 Wesson's sub, lots 2 and 3 Crane's sub, p c 723, 644
Hickey	N E McGraw and Eighteenth	Lots 1, 2, 3, 4, 5 Peppers & Heidt's sub, lot 1 estate J. Messmore
Houghton	S W Abbott and Sixth	Lots 1 and 2 blk 42, Labrosse f
"	" " " "	E ½ lot 3 blk 42, Labrosse f
High, 'Central'	W Brush, S Willis N Alexandrine	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 blk 17 Brush sub, Brush f
Hubbard	W 25th st, near Baker	W ½ of s ½ lot 45 Porter f, except n 30 ft
Irving	N Willis near Woodward	Lots 25, 26 and 27, Willis sub, Park lots 61, 62
Jackson	N Fort near Chene	Lots 3, 4 and 5 Chene f
Jefferson	N E Crawford and Selden	Part lot 5 Forsyth f
Johnston	S Waterloo near Dubois	Lots 13, 14 and 15, blk 29 Dubois f, s w ½ of p c 91
Lincoln	N W Brady and Antoine	Lots 5, 6, 7, 8, 9, 19, 11 blk 10 Van Dyke's sub, A. Beaubien f
Livernois	E Livernois near Michigan	Part p c 574, ½ acre
Miami	E Miami near Wilcox	Lot 9, sec 9, Gov and Jndge's plan
"	E Miami near Wilcox	Part lot 8 sec 9, Gov and Judge s plan
Military Ave.	S E Military and Regular	Lots 540, 541, 542, 443, 544, 545, 446 D. Scotten's sub, p c 32, 268
McKinstry	S W McKinstry and McMillan	Lots 14, 15, 16, 17, 18 sub lot 33, p c 30
Newberry	W 29th st near Visgar	Lots 45, 46, 47, 48 Hammond's sub, lot 51, p c 30
"	W 29th st near Visgar	Lots 43 and 49 Hammond's sub lot 51, p c 30
Nichols	N and S Elm near Seventh st	Lots 20, 21, 22, 23, 32, 33, 34 sub lots 13, 14, 15, 16 Baker f
Norvell	N Arndt near McDougall	Lots 1, 2, 3, 4 Campau s b 42 McDougall f, p c 9, 454
"	S Berlin near McDougall	Alley and lots 12, 13, 14, 15 as above
Oakland	N E Oakland and Holbrook	Part of sec 43 10,000 acre tract
Owen, John	N W Myrtle and Thirteenth st	Lots 4, 5, 6, 7, 8, 9, 10 sub lot 3 Lafferty f
Palmer	N Horton near Antoine	Lots 128, 129, 130, 131, 132 H. Baker s l 2, s ¼ sc 57
Pitcher	W Sullivan near Butternut	Lot 21 part 22, Johnson's sub, p c 727 and 729
Potter	W Tillman near Myrtle	Lots 295, 296, 297 Johnson,s sub Porter f, p c 20, 21
Roberts	N Adelaide near Beaubien	Lots 4 and 5 sub ⅔ lot 177, blk 7, lot 179 L. Beaubien f
"	N Adelaide near Beaubied	Lot 6 sub ⅔ lot 177, blk 7, lot 179, L. Beaubien f
"	N Adelaide near Beaubien	Part lot 8 blk 7, Van Dyke's sub, A. Beaubien f
Rose, M. M.	W Van Dyke near Gratiot	Part of n ⅛ of s ely 2 acres p c 390
Seventeenth	W 17th near Howard	Lots 101, 106, 109, sub Stanton f, p c 473
Seward ave	S E Seward and Crawford	Lots 13, 14, 15, 16 Baker & Becke's sub, ¼ sec 55, 56
Tappan	N W 13th st near Marantette	Lots 46, 49, 52, 55, lot 1 Lafferty f.

DIMENSIONS.	Cost of Site	DATE OF PURCHASE	DEED RECORDED.	Valuation 1864.
100 ft on Hibbard x 130 ft deep.....	Annexed	Oct. 2, 1886	L 327, p 56	$ 2,800
30 ft. on Hibbard and 130 ft. deep...	$ 800	Feb. 8, 1894	L 433, p 395	800
156, 7 on McGraw x 123.84 on 18th...	1,800	Aug. 11, 1888	L 335, p 202 L 335, p 215 L 335, p 217	3,000
100 ft. on Abbott x 130 on 6th.....	750	Dec. 22, 1849	L 37, p 307	7,500
25 ft. on x 130 deep....	700	Mar. 1, 1859	L 76, p 507	
302.86 ft.on Br'sh, 280.35 w 278.85 Al'x	55,000	Jan. 10, 1893	L 432, p 624	58,000
180 ft. on 25th x 162.25 deep.....	3,864	May 9, 1887	L 309, p 245	5,000
150 ft. on Willis x 151.10 deep.....	2,100	July 10, 1868	L 129, p 385	18,750
150 ft. on Fort x 138 deep..... ...	13,000	Oct. 28, 1890	L 369, p 279	15,000
202 ft. on Crawford x 173 on Selden.	2,200	Oct. 13, 1869	L 141, p 515	9,200
84 ft. on Waterloo x 105.25 deep...	2,310	Jan. 11, 1884	L 271, p 32	3,000
90 ft. on Antoine x 100 deep (5-6-7) 120 ft. on Brady x 95 dp. (8-9-10-11)	2,300	Sept. 19, 1872	L 180, p 112	7,250
136.62 on Livernois x 145 deep.	1,672	July 29, 1886	L 303, p 410	1,650
65.65 ft. on Miami x 100 deep.....	300	July 23, 1844	L 15. p 503-4	29,330
20.65 ft " " "	6,500	May 2, 1887	L 309, p 213	
222 ft. on Military x 140 on Regular	800	Feb. 8, 1894	L 314, p 498	5,000
150 ft.on M'Kl'stry x 140 on M'Mil'n	1,650	Nov. 5, 1886	L 295, p 525	3,000
150 ft. on 29th x 147.03 deep...	1,100	Nov. 4, 1886	L 304. p 353	4,000
60 ft. " " "	700	Nov. 15, 1890	L 419, p 165	
132.83 ft. n. Elm x 127.46 on alley x 52.46 w. end 167 ft. s. Elm x 106.90 w. end x 53.83 e. end.....	3,500	Feb. 15, 1882	L 249, p 43	7,710
120 ft. on Arndt x 115.25 deep	1,600	July 19, 1876	L 194, p 446	5,760
120 ft. on Berlin " "	1,500	Dec. 29, 1877	L 205, p 584	
99 ft. on Oakland x 82¼ deep.	Annexed	May 30, 1865	L 117, p 292	1,000
210 ft. on Myrtle x 114 on 13th....	2,800	Jan. 2, 1873	L 178, p 291	6,300
150 ft. on Horton x 125 deep	3,450	Oct. 3, 1890 Oct. 3. 1890	L 368, p 91 L 368, p 92	6,000
110 ft. on Sullivan x 194 deep.....	1,500	July 12, 1870	L 146, p 103	4,000
150 on Tillman x 147 deep	2,250	June 28, 1889	L 344, p 460	3,000
60 ft. on Adelaide x 91.74 deep.....	3,000	Jan. 22, 1890	L 346, p 270	
40 ft. " " "	3,100	Jan. 22, 1890	L 355, p 50	5,000
26 8-12 ft " " "	1,900	Jan. 30, 1890	L 419, p 163	
192 ft. on Van Dyke x 100 deep....	Annexed	Aug. 19 1886	L 295, p 40	3,000
150 ft. on 17th x 103 deep	7,600	April 18, 1824	L 431, p 422 L 432, p 630	7,600
193 ft. on Seward x 175 on Crawford	4,590	June 26, 1894	L 439, p 47	4,590
200 feet on 13th x 130 on Marantette	1,200	June 10, 1867	L 147, p 475	7,000

NAME OF SCHOOL.	LOCATION.	DESCRIPTION OF PROPERTY.
Tappan..	N. W 13th St. and Marantette...	Lot 58, lot 1 Lafferty f. .. .. ..
Tilden.....	N W 7th and Kirby....	Lots s ½ 13, 14. 15, 16, 17 sub lots 34 to 59, Baker f .....
"	" " "	Lots 12-n. ½ 13. sub lots 34 to 39, Baker f .....
Trowbridge.....	N Forest near Hastings.....	Lots 5-6-7-8 Moran's sub. C. Moran farm.....
Van Dyke ...	N W Field and Agnes	Lots 104-105-106 Field's sub. p. c. 678. .....
Van Dyke Ave	W Van Dyke, near Maple	Lots 13-14-15-16 30 ft. of 17 Courtney & Venable's sub. lots 60-63 Van Dyke f; also lot 1 of John J. Shipherd's sub. of lots 64 to 76 Van Dyke f., p. c. 100-679...
Washington ...	W Beaubien near Beacon.....	Lot 8 Cicotte's sub. lot 172 L. Beaubien farm..... ...
" ...	" " "	Lot 7 Cicotte's sub. lot 172 2-5 interest in..... ...
" ..	" " "	Lot 7 Cicotte's sub. lot 172 1-5 interest in .....
" ...	" " "	Lot 7 Cicotte's sub. lot 172. interest in ....
" ...	" " "	Lot 7 Cicotte's sub. lot 172 interest in..... . .....
" ...	" " "	Lot 7 Cicotte's sub. lot 172 quit claim deed..... ....
		Lot 7 Cicotte's sub. lot 172 quit claim deed.....
Webster.	E 21st St., near Howard..	Lots 78-79-82-83-86 Preston's sub. Godfroy f. p. c 729. ...
"	" " "	Lots 74-75 Preston's sub. Godfroy f. p. c. 729... .....
"	" " "	Lot 71 Preston's sub. Godfroy f. p. c. 729. ....
Wilkins.....	S Porter, near 2nd St.....	Lot 4 block 45 Cass farm.....
"	" " "	Lot 5 " " " " .....
Williams ..	N Canfield, near Mt. Elliott ...	Part of lot 21 Leib farm ... ...

DIMENSIONS.	Cost of Site.	DATE OF PURCHASE	DEED RECORDED.	Valuation 1894
50 ft. on 13th x 130 deep	$ 485	Aug. 23, 1867.	L 147, p 475	
135 ft on 7th v 145.82 on Kirby	2,300	July 13, 1886.	L 303, p 411	7,450
45 ft " " deep	1,080	June 9, 1887.	L 313, p 308	
190.48 ft. on Forest x 169.95 deep	7,048 50	Jan. 14, 1889.	L 326, p 415	11,400
150 ft. on Field x 180 on Agnes	4,000	Aug 25, 1887.	L 282, p 430	7,500
217 78 ft. on Van Dyke x 165 deep.	5,200	Jan. 14, 1893.	L 421, p 276 L 421, p 275 L 421, p 271	5,200
50 ft on Beaubien x 218 deep	4,850	May 25, 1870.	L 146, p 45	
	1,320	June 3, 1870.	L 146, p 70	
	990	June 1, 1870.	L 143, p 370	
50 ft. on Beaubien x 218 deep	1,980	June 3, 1870.	L 143, p 372	8,780
	87.50	June 10, 1870.	L 146, p 74	
	130	Mar. 7, 1870.	L 142, p 313	
	5	May 28, 1870.	L 142, p 317	
150 ft. on 21st x 130 deep	2,250	Dec. 18, 1872.	L 178, p 293	
60 " " "	975	June 15, 1874.	L 178, p 416	6,000
30 " " "	1,600	April 24, 1885	L 276, p 395	
50 ft. on Porter x 130 deep	2,750	Aug. 16, 1869.	L 147, p 197	7,200
" " "	3,000	Aug. 16, 1869	L 141, p 216	
186.97 ft. on Canfield x 181.9 deep	4,900	Oct. 11, 1890.	L 366, p 83	4,900

Respectfully Submitted,

DAVID WALLACE,

Secretary.





